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0001
              IN THE UNITED STATES DISTRICT COURT
 1
 2
                FOR THE DISTRICT OF NEW MEXICO
 3
     CHEVRON MINING,
 5
               Plaintiff
 6
                               No. 1:13-CV-00328 PJK/JFR
 7
     UNITED STATES OF AMERICA,
     UNITED STATES DEPARTMENT OF THE INTERIOR,
 8
     UNITED STATES DEPARTMENT OF AGRICULTURE,
 9
               Defendants.
10
11
12
                   TRANSCRIPT OF PROCEEDINGS
13
                        March 14, 2022
14
                           Volume 1
                         Pages 1 - 208
15
16
     BEFORE: HONORABLE JUDGE PAUL KELLY
              UNITED STATES 10TH CIRCUIT JUDGE
17
18
19
          Proceedings reported by stenotype.
20
21
          Transcript produced by computer-aided
22
     transcription.
23
24
25
0002
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0003
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18
19
20
21
22
23
24
25
0004
               THE COURT: Good morning. You may be
1
2
     seated.
               Before we begin, are there any
```

```
preliminaries we need to handle?
 5
               MR. TODD: Good morning, Your Honor.
 6
               Gordon Todd for Chevron.
 7
               Your Honor, we have a couple of things to
 8
     address. First of all, one of Chevron's expert
    witnesses is unavailable to testify this week,
9
    Dr. Robert Haddad, who is a remediation expert.
10
11
    lives in Los Angeles, and his elderly mother is
12
     dying. We talked about it. She is not quite in
    hospice care yet but had a stroke and congenitive
13
14
    heart failure.
15
               THE COURT: Had a stroke?
16
               MR. TODD: She had a stroke. And she was
17
     already suffering from heart disease, so this week
18
     he is meeting with doctors trying to attend to her
19
     medical care and deciding what further care is
     appropriate or not, so he doesn't want to leave the
20
21
     Los Angeles area.
22
               So we discussed with the Government, and
23
     the Government's amenable to leaving the record open
24
     to take care of Dr. Haddad's cross-examination at
25
     some point after this week.
0005
 1
               The Chevron team and Dr. Haddad are
 2
     willing to do it remotely if that would work for the
 3
     Court. He is available at the end of next week or
     the week after.
 4
 5
               I know Your Honor has a Tenth Circuit
     sitting. I think the Government would prefer to do
 6
 7
     it in person. I will let them speak for themselves.
     But we just need to work out a date if that is okay
 8
 9
     with the Court.
10
               THE COURT: We will work on it.
11
               MR. TODD: Great, Your Honor.
12
               The other thing is we have worked out an
13
     agreement, the sides have discussed and if it is
14
     okay with both sides, if it is okay with the Court,
15
     that all witnesses remain in the courtroom during
16
     the hearing. The only fact witness is Mr. Gene
17
     Dewey, who is testifying first. Everyone else is an
18
     expert.
19
               Is that acceptable with the Court?
20
               THE COURT: There is no reason to invoke
21
    the rule.
22
               MR. TODD: Exactly. Thank you,
23
     Your Honor.
               THE COURT: Now, what about exhibits that
24
25
     were to be admitted, agreed upon exhibits prior to
0006
    the commencement of testimony?
1
               MR. TODD: Sorry, I think we need some
    guidance from the Court on that.
```

```
All of the direct examinations have been
     submitted. I don't know if Your Honor needs
 5
 6
     anything further on that, if we need to formally
 7
     tender them when a witness takes the stand.
 8
              And Your Honor previously ruled that all
9
     of the exhibits discussed in direct testimony are
10
     automatically admitted.
11
              So we are all, we are assuming those are
12
     in and nothing else is in yet. I think the
13
     Government has something else they want to say on
14
     that front.
15
               THE COURT: The Government has some
    cross-examination exhibits that they wish to admit?
16
17
              MS. KIMBALL: Yes, Your Honor. We will
18
    have additional exhibits on cross-examination. We
19
    are happy to admit them all at the start, if that is
20
     easier.
21
               THE COURT: Okay, can you speak into the
22
    microphone with the glass sealing here that --
23
              MS. KIMBALL: Sorry about that. Is that
24
    better?
25
              THE COURT: Yes.
0007
 1
              MS. KIMBALL: The Government does have
 2
     exhibits that they will be admitting on
    cross-examination. We are happy to tender all of
 3
    those at the start or we can -- or would the Court
    prefer that we list out where it has already been
    admitted or the Government has a list of everything
 6
 7
    in the directs.
 8
               THE COURT: So it is probably better just
 9
    to do it as we go.
              MS. KIMBALL: Okay. And for the direct
10
11
     exhibits?
12
              THE COURT: Yeah.
13
              MS. KIMBALL: Okay. And for the direct
     exhibits, would the Court prefer that we identify at
14
15
     this point what all is coming in?
16
               THE COURT: You might as well. And I
17
     think just a simple motion would do it.
18
              MS. KIMBALL: Okay. I have a motion for
19
     the Government's witnesses -- for the Government's
20
     Exhibits. I don't have Chevron's.
              MR. TODD: Your Honor, I suspect that both
21
22
    sides have an identical list of everything that has
23
    been admitted so far. Perhaps we should -- well,
     why don't we just move orally, Your Honor? Could we
     move the admission of all of the exhibits identified
25
8000
   in the prefiled direct testimony?
1
              THE COURT: All right. And without
    objections, they are admitted.
```

```
MR. TODD: Thank you, Your Honor.
 5
               Your Honor, would the Court staff like a
 6
     list to work off at this point of what is admitted
 7
     or your law clerks or --
               THE COURT: That would be helpful, I
 8
 9
    think.
10
               Julie, do we have it?
11
               THE DEPUTY CLERK: I have it Your Honor.
12
               THE COURT: We already have it.
13
               MR. TODD: Thank you.
14
               MS. KIMBALL: One other issue, Your Honor,
    because Dr. Haddad is testifying late and because
15
16
    there is, I guess, some question as to whether or
17
    not he ultimately will be able to testify, we would
18
    like to reserve the right to move to strike the
    exhibits that were admitted through his direct
19
20
    testimony.
21
               THE COURT: Who is this now? I'm sorry?
22
               MS. KIMBALL: Dr. Haddad.
23
               THE COURT: The fellow with the stroke,
24
    yeah.
25
              MS. KIMBALL: So if he is ultimately not
0009
 1
    able to testify, we would like to be able to strike
 2
     the exhibits that were admitted, sir.
 3
               THE COURT: All right.
 4
               MS. KIMBALL: Thank you, Your Honor.
 5
               THE COURT: All right. You may call your
 6
    first witness.
 7
               MR. HOPSON: Chevron calls Mr. Gene Dewey.
 8
               (Whereupon the witness was sworn.)
9
               THE DEPUTY CLERK: Please be seated, and
    state and spell your name for the record.
10
               THE WITNESS: My name is R. Gene Dewey.
11
12
    R. G-E-N-E. Dewey, D-E-W-E-Y.
13
               THE COURT: You may proceed.
14
               MR. AUGUSTINI: Good morning, Your Honor.
15
               Michael Augustine for the United States.
16
               THE COURT: I think before we get to the
17
    cross-examination, we need to get his testimony
18
    introduced together with whether or not there is any
19
    changes or additions or deletions.
               MR. HOPSON: I will be brief.
20
21
               Mr. Dewey, did you work for us to prepare
22
    written direct testimony in this case?
23
               THE WITNESS: Yes, I did.
               MR. HOPSON: Is that your testimony under
24
25
    oath?
0010
1
               THE WITNESS: Yes, it is.
 2
              MR. HOPSON: Your Honor, there are no
   additions or revisions.
```

```
THE COURT: Very good.
 5
               Direct testimony will be admitted.
               (Whereupon, the direct testimony of R.
 6
 7
     Gene Dewey was prefiled and admitted.)
 8
               MR. AUGUSTINI: Your Honor, one
 9
     administrative note.
10
               We have handed up a notebook, it is before
11
     you, that contains hard copies of the exhibits that
12
     we may use during cross-examination, just as a
     supplement. It is an electronic trial but sometimes
13
14
     people like to look at a hard copy, too.
15
               So we provided the same notebook to
16
     Mr. Dewey, and otherwise, we'll proceed.
17
               THE COURT: You may proceed.
18
19
20
21
22
23
24
25
0011
                       CROSS-EXAMINATION
 1
 2
         BY MR. AUGUSTINI:
 3
              Mr. Dewey, your first job in the mining
         Ο.
 4
     industry was with Kennecott Copper Corporation; is
 5
     that correct?
               Yes, sir.
 6
         Α.
 7
               Did you work at a Kennecott Mine in
         Q.
     Arizona between 1962 and 1967?
 8
9
         Α.
               Yes, sir.
10
               Kennecott operated a number of mines in
         Q.
     the Western United States, correct?
11
12
               Correct.
13
               Kennecott's Bingham Canyon Utah Mine is
14
     said to be the largest open pit mine in the world;
15
     is that right, or one of the largest?
16
               I believe it still is, yes, sir.
17
               And Kennecott produced molybdenum as a
         Q.
18
     byproduct of its copper mining, right?
19
               Yes.
20
               Did you leave Kennecott and start working
21
     for Molycorp at the Questa Mine in July, 1967?
22
         Α.
               Yes.
23
               When you arrived in 1967, Molycorp had
     already been operating the open pit mine for about
25
     two years, right?
0012
1
         Α.
               Yes.
               And did you report to B.C. Lansing, the
    general manager at that time?
```

Yes.

Α.

```
5
               Did your responsibilities include
         Q.
 6
     analyzing the financial aspects of the Questa Mine?
 7
               Yes.
         Α.
 8
               During your tenure with the company, did
    Molycorp pay all the operational costs associated
9
10
     with the molybdenum mining?
11
               Yes.
         Α.
12
               Did Molycorp receive the many millions of
    dollars generated from the sales of molybdenum
13
14
    produced at the Questa Mine?
15
               Yes.
         Α.
16
               In September of '69, did you become
         Q.
17
    general superintendent of the Questa Mine?
18
               Yes, sir.
               And in that position, were you responsible
19
20
    for all mining activities in Questa?
21
         Α.
               Yes.
22
         Ο.
               Now, in your testimony, you noted that the
23
    Molycorp management team determined when and where
24
    to mine at Questa; is that correct?
               That is correct.
25
        Α.
0013
 1
               And controlling the land was critical to
 2
    Molycorp's mining operations; is that right?
 3
               Would you repeat that?
         Α.
 4
               Controlling the land was critical to
 5
    Molycorp's mining operations, right?
 6
         Α.
               Yes.
 7
               Molycorp made sure that the company owned
    or controlled all the land at the Questa Mine,
 8
9
    correct?
              There was certainly land that wasn't under
10
        Α.
11
    Molycorp's control but --
12
         Q.
             Within the Questa Mine?
13
        Α.
               Yes.
14
               What land was that?
         Q.
15
               All of the unpatented mining claims.
         Α.
16
               Well, with respect to the unpatented
17
    mining claims, Mr. Dewey, didn't Molycorp have
18
     exclusive possession and use of that land, too?
19
               Molycorp had unpatented mining claim
20
    control such as was provided under the law of 1872,
21
22
               And so that included the right to conduct
         Q.
23
     mining on the unpatented land, the unpatented land
     as well as the land that Molycorp owned in fee?
25
               I honestly don't know if any mining
         Α.
0014
1
    occurred on unpatented mining claims.
                                            I can't
     answer that question at this point.
 3
               Okay. That is fine. Mr. Dewey, I will
```

move on.

```
5
               Molycorp's managers ensured there was
 6
     sufficient mining and equipment to conduct the
 7
     mining that needed to be done at Questa, correct?
 8
         Α.
               Yes, sir.
9
               For example, Molycorp purchased excavators
         Q.
10
     and a fleet of hauling trucks to haul land waste
11
     from the open pit, right?
12
         Α.
               Yes.
               No mining equipment was bought by the
13
         Q.
14
     United States, right?
15
               Correct.
         Α.
16
               And based on your experience with the
         Q.
17
     company, Molycorp determined how many employees to
18
     hire and fire on a routine basis; is that right?
19
         Α.
               Yes.
20
               Molycorp employees conducted all the
         Q.
21
     day-to-day mining and disposal activities at the
22
     Questa Mine, correct?
23
               Repeat that, please.
         Α.
24
         Ο.
               Did Molycorp employees conduct all of the
25
     day-to-day mining and disposal activities at the
0015
     Questa Mine?
 1
 2
               Yes, sir.
         Α.
 3
         Ο.
               Thank you.
 4
               And Molycorp's mining plan determined how
 5
     many tons of ore would be supplied to the company
     mill for processing; is that right?
 6
 7
               Yes.
 8
         Q.
               So Molycorp's mining plan determined how
 9
    many tons of tailings the mill would generate,
10
     correct?
11
         Α.
               Yes.
               And similarly, Molycorp's mining plan
12
         Ο.
13
     determined how much waste rock from the open pit
14
     would be dumped on the surrounding land at the mine,
15
     correct?
16
         Α.
               Correct.
17
               Mr. Dewey, I would like to show passages
         Q.
18
     from your direct testimony at this point.
19
20
               MR. AUGUSTINI: We are using the
21
     electronic court page references instead of the
22
     internal pages, just for clarity in the record.
23
               (By Mr. Augustini) Directing your
     attention to the middle of the page, there is a
24
25
     question and answer there, and you stated, "Also,
0016
   waste disposal capacity and planning is a key
 1
     element of feasibility planning. So it was
     something I was very attuned to throughout my time
```

```
4
     at Molycorp."
 5
               THE COURT: Excuse me. Where are you
 6
     reading from?
 7
               MR. AUGUSTINI: Your Honor, the middle of
 8
    page, ECF Page 5, Page 4 of Mr. Dewey's written
 9
     direct testimony.
10
               THE COURT: I am on Page 4 here.
11
               MR. AUGUSTINI: Yes. Just in order to
12
    pull it up --
               THE COURT: It is either Page 5 or 4?
13
14
               MR. AUGUSTINI: I'm sorry, Your Honor, I
15
     tried to explain before to avoid the confusion, and
     I apologize, but it is Page 4 of his written
16
17
     testimony. But just for reference purposes, we're
18
     at the top of ECF filing line. It's Page 5, so that
19
     is why --
20
               THE COURT: All right, I can't tell
21
     whether you are giving him the right quotes if I
22
     can't see it.
23
               MR. AUGUSTINI: Okay. Maybe we could
24
     highlight the passages, if we can on the fly, but
25
     otherwise, I will try to make sure that I'll cite
0017
 1
    both page numbers. I apologize, Your Honor.
 2
               THE COURT: I still only have Page 4 here.
 3
               MR. AUGUSTINI: That is the correct page.
 4
     We'll try to highlight it for Your Honor, please.
 5
               THE COURT: Okay.
               MR. AUGUSTINI: That is what I just read,
 6
 7
     Your Honor. It is now blown up a little bigger.
 8
               THE COURT: Okay.
9
               MR. AUGUSTINI: I apologize.
10
               (By Mr. Augustini) So, Mr. Dewey, so
     hopefully that is a little more visible for you,
11
12
     too. I realize it is hard to pick it out of a blank
13
     page on the screen.
14
        Α.
               Thank you.
15
               But that is your testimony, sir?
         Q.
16
               Waste disposal planning was a key element
17
     of the job of mine planning at Questa?
18
               Very definitely.
         Α.
19
         Q.
               And was Molycorp's engineering department
     primarily responsible for selecting the locations
20
21
     and designing the configurations of the waste dumps?
22
         Α.
               Yes, sir.
23
               MR. AUGUSTINI: Mr. Hambrick, please show
     Exhibit USX015.
24
25
               (By Mr. Augustini) Mr. Dewey, do you
0018
    recognize USX015 as a May 1971 memorandum from
1
    Mr. McKereghan to Mr. Torgerson?
 3
        Α.
               Yes.
```

```
MR. AUGUSTINI: I move to admit USX015,
 5
     Your Honor.
 6
               MR. HOPSON: No objection.
 7
               THE COURT: Without objection, it is
 8
     admitted.
9
               (Exhibit admitted, USX015.)
              (By Mr. Augustini) And here, referencing
10
11
     the sentence just below the first paragraph, "I
12
     believe the following dump criteria should be used."
               So do you agree this is an example of the
13
14
     engineering department establishing the criteria in
15
     which the waste-rock dumps at the Questa Mine would
16
     be designed?
17
         Α.
18
               And the numbers there listed in USX015
         Q.
     would be 600, 9,000, 9,200, those correspond to
19
     elevations at the mine, correct?
20
21
         A.
              Correct.
22
         Ο.
               And so the dumps were located at different
23
     elevations relative to the pit, generally, correct?
24
               Right.
25
         Q.
               The natural terrain at the Questa Mine is
0019
 1
     very steep, isn't it?
 2
        Α.
               Yes.
 3
               And that made Molycorp's mining a little
         Ο.
 4
    bit more of a challenge, right?
 5
               A little bit more what?
               The topography impacted where Molycorp
 6
         Q.
     chose to locate the mill facilities, the truck shop,
 7
     the mine roads, and other aspects of the mine; is
 8
9
     that right?
10
        Α.
               Yes.
               One consideration was Molycorp wanted to
11
12
     maximize the use of available space for waste-rock
13
     dumps near the open pit; is that right?
14
        Α.
15
               MR. AUGUSTINI: Mr. Hambrick, please show
16
     USX601.
17
         Q.
              (By Mr. Augustini) Mr. Dewey, do you
18
     recognize, again, Mr. Torgerson?
19
               Yes, I do.
        Α.
20
         Q.
               And who is he?
21
               He was the chief engineer at the mine at
        Α.
22
     that time.
23
               MR. AUGUSTINI: Your Honor, I move to
24
     admit USX601.
25
               THE COURT: Any objection?
0020
1
               MR. HOPSON: No objection, Your Honor.
 2
               THE COURT: It will be admitted.
 3
               (Exhibit admitted, USX601.)
```

```
(By Mr. Augustini) And this memo,
 5
    Mr. Dewey, refers to Riverside Dump Mechanics; is
 6
     that right, the title?
 7
         Α.
               Yes.
 8
               MR. AUGUSTINI: If we could turn to the
9
    next page, Mr. Hambrick. Highlight the Section 2 at
10
     the bottom, please.
               (By Mr. Augustini) Do you see the
11
         Q.
12
     Section 2 titled, "Maximize Lower Dump Life,"
13
    Mr. Dewey?
14
         Α.
               Yes.
15
               MR. HOPSON: Your Honor, I don't have an
16
     objection. I would like to give a binder with the
17
     complete document to Mr. Dewey so he can see the
18
     document in whole rather than just excerpts that the
19
     Government has provided.
20
               THE COURT: You have that document, don't
21
    you?
22
               MR. HOPSON: Yes, thank you.
23
               MR. AUGUSTINI: It is USX601.
24
               I have a few simple questions.
25
               May I proceed, Your Honor, or --
0021
               THE COURT: Let him find it.
 1
 2
               Did you find 601, Mr. Dewey?
 3
               THE WITNESS: Yes, I did. I have reviewed
 4
    it, sir.
 5
               THE COURT: You may proceed.
              (By Mr. Augustini) Thank you.
 6
 7
               I was just going to reference the first
 8
     sentence under the maximize dump utilization.
 9
               It states, "Recent studies into the
     mechanics of waste disposal at the Riverside dumps
10
     indicate that the upper terrace dumps must lead the
11
12
     lower terrace dumps east to west in order to
13
    maximize the utilization of available dump storage,"
14
     and then the memo continues.
15
               Is this just another example, Mr. Dewey,
16
    of the engineering department doing dump planning
17
     and design in order to maximize the available space
18
     at the site?
19
               Once this became the only option, the
20
    Riverside dumps became the only option, a
21
     significant amount of time was then spent trying to
22
     figure out how to get all of this waste on that
23
     hillside. And this ongoing activity, yes, sir.
24
               Using the space that was available to it,
25
     it was important for the operation, correct?
0022
1
               That is correct.
         Α.
               Okay. By 1974, you were in charge of all
    operations at the Questa Mine; is that right?
```

- A. Yes, sir.
 - Q. And those operations included managing the waste dumps in the company's offsite tailings disposal facility, correct?
 - A. Yes.
 - Q. By the mid-1970s, Molycorp planned to transition from an open pit mine to a -- developed a new underground mine; is that right?
 - A. Yes.
 - Q. And in 1976, I believe you received a promotion to be vice president of the company and moved to the New York headquarters; is that right?
 - A. Yes.
 - Q. And then UNOCAL, Union Oil of California, acquired Molycorp in 1977, right?
 - A. Yes.
 - Q. A few months after the merger, did you and your team present Molycorp's feasibility analysis to UNOCAL seeking corporate approval to develop the new underground mine at Questa?
 - A. Approximately nine months after its merger.

- Q. At the time UNOCAL was one of the largest companies in America, correct?
- A. I don't believe that's correct, no, sir. They were a significantly large company, but not one of the largest.
- Q. Not part of the Fortune 500, that you recall?
 - A. I don't know.
 - Q. Okay. At your deposition, I believe you mentioned that the Questa project was the largest investment that UNOCAL had made up to that point in time; is that correct?
 - A. That is correct.
 - Q. The United States provided no funding for the development and operation of the underground mine, right?
 - A. No, that is not correct.
 - Q. What funding did the U.S. provide?
 - A. They provided half the funding for the defense mineralization defense contract work.
 - Q. Okay. So other than that one loan, which occurred in 1957, correct?
 - A. Correct.
- Q. The United States provided no funding whatsoever for the development of the underground
- 1 mine, which happened 20 years later.
- 2 A. I still don't agree with that statement, 3 sir.

- What else besides the DMEA loan, sir? Q.
- 5 The involvement of the USGS in the Defense Α. 6 Minerals Exploration Act and their certification of the resource that they said was identified as a 7 result of that project enabled Molycorp to get 8 9 funding from Wall Street to do this operation.
 - So my question was direct funding, sir. There was no financing by the United States provided with respect to the
 - underground mine, correct?
 - Correct. Α.
 - Now, between 1985 and 2000, you served as Q. president of Molycorp, right?
 - Correct. Α.
 - And during that period Molycorp owned all Q. the land at the Questa Mine, including the open pit and the underground mine, right?
 - Α. Yes, sir.
 - Ο. Molycorp generated and disposed of 100 percent of the waste rock in the piles at the Questa Mine, correct?
- 25 Α. Yes.
- 0025 1

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23 24

- Molycorp also generated and disposed of 100 percent of the tailings at the company's offsite tailings facility, correct?
 - Α. Yes.
 - And in addition to the initial dumping of Q. waste, Molycorp was responsible for managing and maintaining all the waste piles at the Questa Mine, correct?
 - Correct. Α.
 - Molycorp's activities included Q. consolidating the piles, grading, cutting benches, into the piles to facilitate ongoing disposal of waste rock, correct?
 - Α. Correct.
 - And if the market price warranted, could Q. Molycorp take what was previously marginal there and process it to sell from the piles?
 - There was one period in time in which we attempted to do that unsuccessfully.
 - I think you testified at your deposition, sir, that some material was taken from the Sugar Shack and middle waste-rock piles in the latter years of the open pit history; is that correct?
- One period, if I said latter years, that 24 Α. 25 is correct. A small amount for a month or two to 0026
- see if that was a possibility. The first time in a 1
- long time the price of molybdenum had increased
- dramatically and we were not in a position to

```
participate in that market.
 5
         Q.
               In your 33-year career with Molycorp,
 6
     Mr. Dewey, the company directed, managed and
 7
     controlled all of the mining disposal operations at
 8
     the Questa Mine and the offsite tailings area,
 9
     correct?
10
         Α.
               Correct.
11
               Okay. Mr. Dewey, I know you are very
         Q.
12
     familiar with the open pit's operational history.
13
               MR. AUGUSTINI: At this time,
14
     Mr. Hambrick, I would just -- please show USX594.
               (By Mr. Augustini) Mr. Dewey, are you
15
16
     familiar with a promotional video Molycorp made in
17
     the mid-1960s called, "A Story of Molycorp," as
18
     reflected in this screenshot?
19
         Α.
               In the mid-1960s?
20
         Q.
               Or at any time, sir.
21
               Have you ever heard of this video before?
22
               I don't know about the mid-1960s.
         Α.
23
               I believe I'd have to see it, but I think
24
     this was done in conjunction with the dedication of
25
     the new underground mine, which would have been, you
0027
 1
     know, in 1983 or so.
 2
         Q.
               Okay.
 3
               MR. AUGUSTINI: Well, Your Honor --
 4
         Α.
               I would have to see it.
 5
                      I understand, sir. One moment.
         Q.
               Sure.
               MR. AUGUSTINI: Your Honor, we have a
 6
 7
     short video clip from this movie that we would like
 8
     to request permission to display. It is about two
 9
     minutes long. And then Mr. Dewey would have a
10
     better basis to identify what's shown.
               THE COURT: What is the purpose of the
11
12
     movie?
13
               MR. AUGUSTINI: The purpose is it depicts
14
     the operations occurring in the open pit, including
15
     the excavation of material, the loading of haul
     trucks and the dumping of waste down on the waste
16
17
     piles.
18
               THE COURT: Is there a dispute about any
19
     of that?
20
               MR. AUGUSTINI:
                               I don't think there is any
21
     dispute that --
22
               THE COURT: If there is no dispute, let's
23
     move right on by that.
24
               MR. AUGUSTINI: Okay, Your Honor.
25
              (By Mr. Augustini) Mr. Dewey, you are
0028
     familiar with the haul trucks that Molycorp used?
 1
              Yes, sir.
 3
         Q.
               Some of those had up to a 100-ton payload
```

capacity; is that right?

```
5
               The largest trucks we had were 120 tons.
 6
               As part of the open pit mining, was the
 7
     company interested in acquiring the largest possible
 8
     haul trucks it could?
              We were -- we would love to have it but we
9
10
     didn't have the money to do that.
11
               Still a 100-ton payload is -- I mean,
12
     these are gigantic machines, right?
13
               Nothing compared to the 400-ton trucks
14
     that exist today, and as it evolved in the period of
15
     time from 120 tons to 200 to 300 to 400. We would
     have loved to have had that.
16
17
               Sure.
         Q.
18
               But just for the laymen, who is not used
19
     to seeing these, they are not just pickup trucks,
20
     they're hauling waste?
21
        Α.
               Right.
22
         Ο.
               And when you were working as an executive
23
     at the Questa Mine, did you frequently observe haul
24
     trucks going back and forth from the pit to the
25
     waste piles dumping waste?
0029
 1
               Yes, sir.
         Α.
 2
               Was that basically a continuing constant
 3
     process as relating while mining was occurring?
 4
         Α.
               24/7.
 5
               And waste hauling, you testified, was one
         Q.
     of the biggest cost drivers of the entire open pit
 6
 7
     mining operation, right?
 8
         Α.
               Excuse me?
9
               Was waste hauling one of the biggest cost
10
     drivers of the open pit mining?
               Yes, the biggest.
11
         Α.
12
         Q.
               The biggest.
13
               That is why Molycorp wanted to dump waste
14
     rock as close to the open pit as possible, right?
15
               No, sir.
        Α.
16
               Well, the longer the haul, the more
         Q.
17
     expensive, right?
18
               It depends on the gradient of the haul,
19
     the method of the haul. I really -- truck versus
     conveyors for example, so --
20
21
               Understood.
22
               Molycorp conducted all of the blasting and
23
     excavating, maintained all the mine roads at the
     Questa open pit mine; is that right?
25
               Yes, sir.
         Α.
0030
1
               Would you say it was a fairly -- because
     of all of that activity, there was a fair amount of
     dust that was generated?
```

```
No. There was a little bit of dust after
 5
     a blast, but we always had water trucks on the road.
 6
     Several water trucks. That was critical. It was
 7
     impossible for those trucks to operate in a dusty
     environment.
 8
 9
         Q.
               The terrain is so steep and visibility is
10
     important for the drivers, correct?
11
               For the drivers and for the employees.
12
         Q.
               Right.
               MR. AUGUSTINI: Mr. Hambrick, please
13
14
     display USX584.
15
               (By Mr. Augustini) Mr. Dewey, I will
16
     represent to you that this is a top and bottom
17
     before and after depiction of the Questa Mine.
18
               If you notice, the date below the top
     photograph, October 7, 1962, the date below the
19
20
     bottom photograph, July 7, 2016.
21
               Do you recognize that the Questa Mine is
22
     depicted in those photos?
23
               Yes, sir.
         Α.
24
               And the top photo from 1962 was from
25
     before Molycorp's open pit mining, correct?
0031
 1
               Correct.
         Α.
 2
               To your knowledge, there were no visible
 3
     waste piles of any significance on the surface at
     the Questa Mine in 1962?
 4
 5
               That is correct.
         Α.
               Nothing like what we see in 2016, correct?
 6
         Q.
 7
         Α.
               Yes, that is correct.
 8
               And in the 1962 photo, are you aware that
         Q.
9
     the site was generally forested with trees?
10
               Far from it.
               The site, it included several hydrothermal
11
12
     scars that were a constant source of pollution to
13
     the Red River after every rainstorm.
14
               I would not call it pristine.
15
     river would trench, all the way from just below Red
16
     River to below the mine site. Contains at least
17
     half a dozen hydrothermal scars.
18
               Pristine is not a word I would use, sir.
19
               I didn't say pristine. I asked if there
         Q.
20
     were trees.
21
               There were trees in 1962 at the site,
22
     correct?
23
        Α.
               It was what?
24
         Q.
               There were trees, that's all.
25
               Oh, trees. Not many at the mine site.
         Α.
```

16

sulphur qulch, it was completely denoted from the

Again, if you look at a blowup of that

0032

hydrothermal scars.

```
Obviously, there were trees where the dump
 5
     site is, yes, but where the open pit mine took place
 6
     on the east side, that was -- there were no trees of
 7
     any consequence.
 8
               Mr. Dewey, I have circled the area in the
 9
     1962 photo. I agree there are bare spots where the
     hydrothermal scars are located.
10
11
               Did I circle the one that you were
12
     referring to?
13
         Α.
               Yes, sir.
14
               Okay. But otherwise, there were trees at
         Q.
15
     the site but there weren't, as of 2016, the white
16
     area that we see in the bottom photo, that is all
17
     waste rock, correct?
18
               That is correct.
        Α.
19
               MR. AUGUSTINI: Mr. Hambrick, could you
20
     please display US Demonstrative Exhibit 2.
21
               (By Mr. Augustini) Mr. Dewey, when you
22
     have a chance, you agree that this photograph
23
     depicts the general appearance of the Questa Mine
24
     open pit mining, sir?
25
        Α.
               Yes, sir.
0033
 1
               Okay. Some of the lettering is a little
 2
     bit small to read, perhaps, on the screen, but you
     are familiar with the layout.
 4
               Do you see in green down on the south
 5
     there is a label for the Red River and Highway 38?
 6
         Α.
               Yes.
 7
         Q.
               That is where those were located, correct?
 8
         Α.
               Yes.
9
               And in the foreground, there is a blue
     label that sits on top of the mill area.
10
               Is that the correct location?
11
12
         Α.
               Yes, sir.
13
               Thank you.
         Q.
               And the elevation, there in the mill area,
14
15
     is a little bit lower than what you would get if you
     head up to the top of the open pit rim, correct?
16
17
               The elevation at the mill area is 7900,
         Α.
18
     elevation to the very top of the pit is 10,000.
19
               And if we look down the Red River trench,
20
     the canyon, and we keep going all the way in the
21
     distance, are those the Guadalupe Mountains that we
22
     can see at the top of that photograph?
23
               THE COURT: If you would stay a little
     closer to the microphone. Thank you.
25
              (By Mr. Augustini) Mr. Dewey, do you
0034
     recognize the Guadalupe Mountains at the top of the
1
     photograph?
              Yes, yes, I do.
 3
         Α.
```

```
And the company's offsite tailings
 5
     facility was located just at the base of those
 6
     mountains. You may be able to make it out even, the
 7
     white areas.
 8
               Does that correspond to the company's
9
     tailing facility?
               Yes, it does, sir.
10
         Α.
11
               And is the approximate pit rim identified
         Q.
     accurately with an orange circle on this
12
13
     demonstrative?
14
               Is the pit rim represented?
15
               Yes, yes, sir.
         Α.
16
               Okay. Thank you.
17
               And are the various waste piles that were
18
     located during the open pit mining also correctly
19
     labeled with the blue lettering surrounding the pit?
20
               Yes, sir.
         Α.
21
               Excuse me. May I point out something to
22
     go back to a question that you had a couple of times
23
     ago?
24
               You have a better view of what this pit
25
     looked like before we started in the top part of
0035
 1
     that hydrothermal scar.
 2
               Okay. Your counsel can follow up, if he'd
         Q.
 3
     like.
 4
        Α.
               Very good.
 5
               Thank you.
         Q.
               And the so-called roadside piles, do you
 6
 7
     see those depicted on the demonstrative?
               THE COURT: What did you call them?
 8
 9
     Roadside?
10
               MR. AUGUSTINI: Yes, sir, they are called
     the roadside piles.
11
12
               I have never heard them called roadside
13
     piles, but the piles that are adjacent to the
14
     highway you are referring to.
15
               (By Mr. Augustini) Sure.
         Q.
               We are talking about Sulphur Gulch,
16
17
     Mid-Low and Sugar Shack?
18
         Α.
               Yes, yeah.
19
         Q.
               Now, are you aware that those three piles
20
     in particular above the state highway are roughly a
21
     thousand feet tall?
22
        Α.
               Yes.
23
               And what is the green forested area on the
         Ο.
     south side of the Red River?
25
               What is it?
         Α.
0036
1
               Is that part of the Carson National
         Q.
     Forest?
 3
        Α.
             Yes.
```

```
When you came to Questa in the late 1960s,
 5
     the Red River already was a popular spot for trout
 6
     fishing, right?
 7
               Yes.
         Α.
 8
               The state's Fish Hatchery is only about a
         Q.
     mile downstream from the tailings impoundments,
 9
10
     right?
11
               Right, right.
         Α.
12
               And the area around Questa in the late
13
     '60s, was there a prime destination for skiing and
14
     various outdoor recreation, right?
15
               That is correct.
               And when Molycorp decided to develop an
16
         Q.
17
     open pit mine, it was aware of its surroundings and
18
     the environment, right?
               Yeah, that is correct. Molycorp had been
19
20
     there since 1920.
21
         Q.
               Right.
22
               Now, Mr. Dewey, I would like to turn to
23
     some questions about Kennecott.
24
               When you left Kennecott in 1967, were you
25
     aware that Kennecott and Molycorp had a longstanding
0037
    business relationship?
 1
 2
         Α.
 3
               Did you find that out after you joined
         Ο.
 4
     Molycorp?
 5
         Α.
               Yes.
               MR. AUGUSTINI: Mr. Hambrick, please
 6
 7
     display CX519. Sorry, USX519.
 8
               (By Mr. Augustini) Mr. Dewey, Molycorp is
9
     a publicly-traded corporation, right?
10
               Yes, sir.
         Α.
11
               And Molycorp prepares reports, annual
12
     reports to shareholders, right?
13
               Yes, sir.
         Α.
14
               What we have displayed in USX519 is the
15
     1955 annual report.
               MR. AUGUSTINI: If we could turn to
16
17
     Page 3, Mr. Hambrick.
18
               And the first full paragraph, please blow
19
20
               (By Mr. Augustini) Do you see the
21
     reference there to a stock purchase by Kennecott,
22
     Mr. Dewey?
23
         Α.
               Yes, sir.
               So Molycorp sold Kennecott 50,000 shares
24
         Q.
25
     of stock in exchange for about 2.8 million in 1955,
0038
1
     right?
 2
         Α.
               Yes.
 3
         Q.
               And that money received in 1955 could be
```

used to conduct exploration for newer bodies in

```
5
     Questa, correct?
 6
               It was used for general corporate expense,
 7
     including some exploration, I'm sure.
 8
               So it was up to the company how to use the
 9
     funds once the transaction was completed, correct?
10
        Α.
              Yes, sir.
11
               And that was two years before the small
         Q.
     DMEA loan that you mentioned earlier in your
12
     testimony.
13
14
               Two years prior to the DMEA loan in 1957?
15
         Α.
               Yes, yes, sir.
16
               And just briefly turning to the Page 4,
         Q.
17
     you probably are familiar with this, Molycorp and
18
     Kennecott also had a common interest to explore and
19
     develop a rare earth mine in Oka, Québec?
20
               Not a rare earth mine, sir. It was a
21
     Columbian mine.
22
               Okay. Nevertheless, there was a
     partnership with Kennecott to develop and explore at
23
24
     the mine in Canada, correct?
25
         Α.
               It was at the stage of exploration, yes,
0039
 1
     sir.
 2
               And joint venturers to develop mines are
     fairly common in the mining industry; isn't that
 3
 4
     right?
 5
               Yes, that occurs.
         Α.
 6
               And is there a reason because mines are so
 7
     capital intensive to develop a mine, it costs a lot
     of money so partners -- partnerships are born?
9
               Generally, the reason is one company or
10
     the other has the right to explore that and they are
     willing to bring another company in that might have
11
12
     some expertise in that particular -- in this case,
13
     you know, I learned a lot about that after I became
14
     vice president, but in this case, the Boca, Molycorp
15
     had been involved in Columbia, from Brazil, Molycorp
     had been involved in producing Columbian products
16
17
     and Kennecott had no experience with Columbian.
18
               And so it was Kennecott's advantage to try
19
     to entice Molycorp to get involved in this project
     in order to determine whether it might be
20
21
     competitive of what was going on in other parts of
22
     the world.
23
         Q.
               Sure.
               And Kennecott provided capital to Molycorp
24
25
     for that in connection with the partnership, right?
0040
1
               That's correct.
         Α.
 2
               MR. AUGUSTINI: Mr. Hambrick, please
 3
     display CX119.
```

```
(By Mr. Augustini) Mr. Dewey, do you
 5
     recognize the Molycorp Molybdenum Corporation of
 6
     America header and see the date, September 26, 1961?
 7
               Yes, sir.
         Α.
 8
               And the location is New York. That is the
         Q.
 9
     Molycorp headquarters, correct?
10
         Α.
               Yes.
11
               MR. AUGUSTINI: Your Honor, I move to
12
     admit CX119.
13
               MR. HOPSON: No objection.
14
               THE COURT: Admitted.
15
               (Exhibit admitted, CX119.)
16
              (By Mr. Augustini) If we could just scroll
17
     briefly to the end to see the signature.
18
               Do you see at the bottom, this memo is
19
     signed by William Kuntz?
20
        Α.
               Yes, sir.
21
               What position did he hold at Molycorp at
22
     the time? Was he president?
23
               He was certainly president by the time I
24
     got there. I am not sure when he, the exact date he
25
     became president. It could very well have been.
0041
 1
               So a senior executive, nonetheless, in the
         Q.
 2
     '60s?
 3
               Yes. He was treasurer and assistant
         Α.
 4
     secretary prior to being appointed president, so,
 5
               And the date, 1961, this is after the DMEA
 6
         Q.
 7
     exploration, correct?
 8
         Α.
               Yes.
9
               And Molycorp, at this time, had not
10
     decided on a method of mining yet, right?
              No, I don't agree with that.
11
         Α.
12
         Q.
               Okay. Well, let's look at the -- I'm
13
     sorry.
14
               Because at this point in time, 1961, the
15
     fact that they were no longer going to be able to
     use this 50-ton-a-day run by mules and a few 50
16
17
     employees, they had now encountered this significant
18
     large low-grade deposit, that was going to be
19
     something quite different.
20
               Yes.
         Q.
21
               But low-grade deposits can be mined either
22
     through underground mining methods or open pit
23
     mining methods, correct?
               Absolutely not. Low grade -- low grade --
24
         Α.
25
     the low grade that we mined at Questa, there is no
0042
     mine in the world that could successfully pull that
1
     off from underground and be economic.
 3
         Q.
               Yes.
```

```
But that has to do with how close they are
 5
     to the surface as opposed to the grade of the ore,
 6
     right?
 7
               Molycorp had been mining 5 percent rock, 3
         Α.
 8
     to 5 percent. We are talking rock here that was
     three-tenths of 1 percent, so anyway, the decision
9
     to do an open pit, in my mind, was made even as
10
11
     early as 1960 when the definitive drilling was
12
     initiated.
13
         Q.
               Okay. We will definitely get into this in
14
     more detail, but since you brought it up, what was
15
     the ore grade in the new underground mine?
               Well, approximately -- I think the average
16
17
     grade was pulled out with something around 0.297.
18
               That is low grade, isn't it?
         Q.
19
              Not as low as 0.18. And it happened to be
20
     3,000 feet below the surface versus the open pit is
21
     on the surface.
22
```

- Okay. So I just want to understand, the Ο. underground mine was nowhere near 5 percent that they had been doing in the 1920s and '30s, right?
- 24 25 It is significantly lower than -- did you 0043
- 1 not refer to it as low-grade ore when you were 2 mining? 3
 - Α. In the 1930s?
 - Q. In the 1930s, you mentioned the grade of, or that they were extracting from these veins was 5 percent?
 - Α. Right.
 - What was the grade of the ore that you Q. extracted from the underground mine?
 - Roughly three-tenths of 1 percent. Α.
 - Three-tenths of 1 percent. .03. Ο. Okay. Turning back to CX119, the first paragraph mentions Al Grazulin.

14 You know, him, correct?

15 Α. Yes.

23

4

5

6

7

8

9

10

11

12 13

16

22

- What was his role at Molycorp? Q.
- 17 He had been assistant manager and then 18 there was a period of time when he served as 19 manager.

And when I arrived, he was in charge of 20 21 our Government relations.

- Q. Okay.
- 23 He was a staff person working on -basically he spent time in Santa Fe when the Santa 25 Fe legislature was in session. 0044
- 1 Okay. That is a fair description. 2 Do you see that there is -- Mr. Kuntz's memo mentions that Al Greslin was in the process of

```
locating 570 additional mining claims around Questa?
 5
         Α.
               Yes, sir.
 6
         Ο.
               And there is a reference there that
 7
     Mr. Kuntz is pleased that Molycorp has beaten Climax
 8
     to the best prospects for mineralization in Questa,
 9
     right?
10
         Α.
               Yes.
11
               And Climax was, at the time and throughout
         Q.
12
     the history of the mining in Questa, the largest
     producer of molybdenum in the world by far, right?
13
14
               Yes.
         Α.
15
               So Molycorp knew that Climax, as a
         Ο.
     dominant player in the molybdenum mining market was
16
17
     looking for opportunities to exploit molybdenum
18
     deposits in Questa as well, correct?
19
         Α.
               Correct.
               And if Molycorp did not maintain its
20
         Q.
21
     mining claims correctly, in accordance with the law,
22
     Climax was active in the area and looking to take
23
     advantage of opportunity, correct?
24
         Α.
               Correct.
25
         Q.
               Now, with respect to Kennecott, Mr. Kuntz
0045
     writes, in the middle --
 1
 2
               MR. AUGUSTINI: If we could pull out,
 3
     Mr. Hambrick, the lower half of the memo.
 4
         Q.
               (By Mr. Augustini) -- refers to Kennecott
 5
     exploration.
 6
               Do you see that, Mr. Dewey?
 7
               Yes, sir.
 8
               Were you aware that Kennecott conducted a
9
     field examination of the Questa Mine --
10
        Α.
               I am.
               -- in summer of 1961?
11
         Ο.
12
         Α.
               Yes.
13
               And Kennecott assisted Molycorp in
         Q.
14
     evaluating the potential for the future mine that
15
     was under consideration at that time, correct?
16
               No. They -- Kennecott was working on
17
     their own behalf. I don't believe they were
18
     assisting Molycorp. They were deciding whether it
19
     was something they wanted to pursue or not.
20
               Well, in any event, Molycorp invited them
21
     or allowed them to come onto the property and look
22
     at all the data and evaluate what the situation was?
23
               At this point, as you pointed out, they
     were shareholders, significant shareholders of that.
25
               Okay.
         Q.
0046
               MR. AUGUSTINI: Mr. Hambrick, please
1
     display CX118.
              (By Mr. Augustini) The title is a little
 3
         Q.
```

```
bit faded, Mr. Dewey, but do you see that is the,
 5
     "Final Report at Questa Mine Examination, Taos
     County, New Mexico"?
 6
 7
               Yes.
        Α.
 8
         Q.
               Do you recognize this report?
9
         Α.
               Yes, sir.
10
               This was prepared by Bear Creek Mining,
         Q.
11
     correct?
12
        Α.
               Yes, sir.
               And that was a division of Kennecott,
13
         Q.
14
     right?
15
         Α.
               Yes.
               MR. AUGUSTINI: If we could turn to
16
17
     Page 11, Mr. Hambrick, please.
18
               I don't think that is the right page.
               (By Mr. Augustini) But do you recall that
19
20
     Kennecott provided Molycorp with a proposed
21
     financial analysis for a block caving mine in this
22
     report?
23
               I don't re- -- I think Kennecott, in this
         Α.
     report, looked at the possibility of block caving
24
25
     and open pit.
0047
 1
               So that was something -- a block caving is
 2
     an underground mine, correct?
 3
               That is correct.
         Α.
 4
               So that was something still in play, at
 5
     least in terms of Kennecott's report, as of 1961,
 6
     correct?
 7
               That is correct.
 8
               But, sir, this other resource, as you
9
     pointed out, we went underground to mine
     three-tenths ore, that was known at the time and it
10
     was assumed that at some point in time the mine
11
12
     would go underground because everybody was plunging
13
     underground.
14
               So they looked at -- they looked at the
15
     possibility of doing that through block caving.
16
     believe Kennecott was one of the first block caving
17
     mines. In fact, the mine I worked at in Arizona
18
     prior to 19 -- I don't know when, the 1940s or
19
     somewhere, was a block caving mine.
20
               So this was a concept they clearly
21
     understood, yes.
22
               And just not to minimize the levels of
23
     analysis but a mining company would want to crunch
     the numbers for either possibility to understand
25
     which is the best option to undertake first,
0048
1
   correct?
 2
        Α.
               Yeah, but not necessarily undertake first.
 3
               In this case, everybody was on -- sitting
```

on the surface. This underground portion is several thousand feet deeper and away from that surface expression.

Q. Sure.

My question was just, you would want to make sure you understand which ore body was going to be most advantageous to exploit before deciding which direction to go, correct?

You have to run the numbers to know that.

A. Not -- the plan that was developed was to exploit first what was laying on the surface to try to generate some of the revenue they might be able to use to develop these material that was several thousand feet under the mountain.

So the timing of when this large open pit possibility exist -- was necessary to start first because that was the easiest and quickest thing to get into operation.

An underground operation, you are talking five to seven, seven years at that point in time, so they are talking 40 or 50 years.

But the -- so to answer your question,

yes, they looked at the underground portion of that ore deposit and they looked at the open pit portion.

Q. Okay.

 $$\operatorname{MR}.$$ AUGUSTINI: If we could turn back to CX119, Mr. Hambrick.

Q. (By Mr. Augustini) Down on the very last line and onto the second page, Mr. Kuntz states, "I got the impression that Carmen feels that a deal with Kennecott or a comparable large money company would accelerate our quest for exploration because of the professional and specialized training of their personnel."

Does that make sense to you, that the company would be thinking about whether a partnership or some involvement by Kennecott in the mine might make sense in '61?

- A. This individual felt that way, yes, sir.
- Q. Turning down to the last sentence of the memo .

"I advised Carmen and Greslin that any expenditures necessary to the exploration program should be made. I tried to impress upon them that we are intent on making a mine out of Questa and we should do it as expeditiously as possible."

Is that your understanding of Molycorp's 0050

view as of 1961 to get moving and develop a mine as quickly as possible?

A. Yes. Molycorp couldn't exist at that

```
point in time without this mine, and that is why I
     said earlier, I believe that Mr. Kuntz and company
 6
     had made a decision in 1960s, shortly after the ore
 7
     deposit was discovered.
 8
               The company made the decision to proceed
9
     with the open pit, correct?
10
         Α.
               Correct.
               MR. AUGUSTINI: Mr. Hambrick, please
11
12
     display USX191.
13
               (By Mr. Augustini) Mr. Dewey, do you see
14
     the title of this article is, "Long-Haul Drilling"?
15
               Yes, sir.
         Α.
               And the name to the right, Jack F.B.
16
         Q.
17
    Dolman?
18
               Yes.
         Α.
               Molycorp, correct?
19
         Q.
20
         Α.
               Yes.
21
         Q.
               Was he the chief geologist at Questa?
               At that time, right, yes, sir.
22
         Α.
               And if we look down at the bottom -- this
23
         Q.
24
     is a poor copy, so maybe you won't be able to see
25
     the date -- there is a Mining Engineering.
0051
 1
               Is that a publication you are familiar
 2
     with?
 3
               May of '65?
         Α.
 4
         Q.
               Correct.
 5
               If we expand the lower right-hand corner,
 6
     at the time.
 7
               Mr. Dolman states that, "The company had
 8
     allotted about a year to investigate the ore
 9
     possibilities at the Questa Mine, which at the
     outset was considered only as an underground
10
     operation."
11
12
               Do you see that sentence?
13
               I see that.
         Α.
14
               And then a little bit further down,
15
     Mr. Dolman writes, "About halfway through the
     project, the possibilities of an open pit ore
16
17
     deposit became apparent."
18
               Do you see that, Mr. Dewey?
19
         Α.
20
               And then Mr. Dolman states that, "A large
21
     amount of drilling had to be done in a short period
22
     to prove or disprove a feasible open pit deposit."
23
               Right?
24
         Α.
               Yes.
25
               MR. AUGUSTINI: Move to admit USX191,
0052
     Your Honor.
1
               THE COURT: Any objections?
 3
               MR. HOPSON: No objection.
```

```
THE COURT: Without objection, 191 is
 5
     admitted.
 6
               (Exhibit admitted, USX191.)
 7
               MR. AUGUSTINI: Mr. Hambrick, please
 8
     display CX130.
 9
               (By Mr. Augustini) Mr. Dewey, this is,
10
     again, a Molycorp letterhead. The date is April 20,
11
     1964, correct?
12
         Α.
               Correct.
               If you look at the first line or the
13
         Q.
     subject is, "Questa Financing Chemical Bank New York
14
15
     Trust Company, " correct?
               Yes, sir.
16
         Α.
17
         Ο.
               Are you familiar with that bank?
18
         Α.
               That was one of the lenders of the
19
         Q.
20
     company?
21
         Α.
               Yes, sir.
22
         Ο.
               And the first sentence states, "Bob Kuntz,
23
     Ken Walker, Bob Davis and William Kuntz met with the
24
     people from Chemical Bank."
25
               Correct?
0053
 1
               Yes.
         Α.
 2
               And just briefly, there is discussion of
 3
     the terms of the loans that Molycorp was seeking
 4
     from the banks, correct?
 5
         Α.
               Right.
               Now, ultimately, Molycorp did obtain
 6
         Q.
     financing in the amount of 20 million from Bankers
 7
     Trust and Malin Bank; is that right?
 8
9
               That is correct.
         Α.
10
               And Chemical Bank provided Molycorp with
         Q.
     additional financing in 1964 through a
11
12
     12.4 million-dollar debenture agreement; is that
13
     right?
14
         Α.
               You are correct, yes.
15
               Do you agree those bank loans were
16
     critically important to the company to develop the
17
     pit?
18
               Yes.
         Α.
19
               In fact, Molycorp obtained private
         Q.
     financing to fund the development and pit mining
20
21
     operation, correct?
22
         A. Correct.
23
               I believe you stated in your written
         Q.
     testimony the development costs alone were about
25
     $50 million.
0054
1
               Is that approximate?
 2
         Α.
               That is correct.
               And in 1965, that would qualify as a very
 3
         Q.
```

```
large investment for Molycorp, right?
 5
        Α.
               Yes.
 6
               And it is a big investment for the banks,
         Q.
 7
          They are loaning the money for the pit, too,
 8
     correct?
9
         Α.
               Correct.
10
               By contrast, the United States did not
         Q.
     provide Molycorp with any capital for the open pit
11
12
     development or operation, correct?
               That is correct.
13
14
               The United States didn't purchase company
15
     stock like Kennecott did, right?
16
               That is correct.
17
               Nor did Molycorp and the United States
18
     enter into any partnership agreements or share
19
     profits or losses with respect to the mine
20
     operations at Questa, correct?
21
               I believe the DME contract required
22
     Molycorp to repay the loan from any operation that
23
     was a result of the exploration program, and which,
     in fact, was paid off within a matter of a couple of
24
25
     years on the open pit mining operation.
0055
 1
         Q.
               Sure.
 2
               Other than paying back the money it
 3
     borrowed to DMEA, there is no sharing of profits or
     losses involved, right, with the United States?
 5
               That is not correct, sir.
 6
         Q.
               Well, you paid back the bank loans,
 7
     correct?
               We paid back the bank loans but we paid
         Α.
9
     millions of dollars in taxes over the years, you
10
11
         Ο.
               Because you think taxes are --
12
         Α.
               We had no profits, but they certainly
13
     shared in the cost of -- associated with the
14
     Government revenues; i.e., state taxes, federal
15
     taxes, so on.
16
               Okay. Well, taxes are just -- everyone
         Q.
17
     pays taxes, right?
18
               Everyone pays taxes, but they were the
19
     only beneficiaries of that operation, to the best of
20
     my knowledge.
21
               You view taxes as some form of a joint
22
     venture or partnership, is that your testimony?
23
               MR. HOPSON: Objection, argumentative.
24
               THE COURT: Sustained.
25
               MR. AUGUSTINI: Mr. Hambrick, let's
0056
     display USX3, please.
1
              (By Mr. Augustini) Mr. Dewey, are you
     familiar with an S1 Registration Statement Molycorp
```

filed in October, 1964?

```
5
         Α.
               Yes, sir.
               Turning to Page 12 or maybe you are
 6
         Ο.
 7
    generally familiar, were you aware that Kennecott
 8
     supplied almost all the ore that Molycorp processed
 9
     in its roster?
10
         Α.
               That was Molycorp's primary business, yes.
11
         Q.
               Right. The road it wasn't mining that was
12
     the primary business, it was the roasting of
     molybdenum ore that other companies, such as
13
14
     Kennecott, supplied, correct?
15
               That supplemented with the underground
16
     mining, that is correct.
17
         Q.
               Okay.
18
               MR. AUGUSTINI: Mr. Hambrick, please turn
19
    to USX559.
20
               (By Mr. Augustini) Are you familiar,
         Q.
21
    Mr. Dewey, with the UNOCAL Form S8 Securities
22
    Registration payment from 1977?
23
               Yes, I have seen this, yes, sir.
         Α.
24
               And you mentioned earlier UNOCAL acquired
25
    Molycorp in the summer of 1977?
0057
 1
               Yes.
         Α.
 2
              By that time Molycorp was well into
 3
    planning what to do after the open pit mine,
 4
    correct?
 5
         Α.
               Correct.
               Molycorp wanted to invest between 200 to
 6
 7
     300 million to develop a new underground mine at
 8
    Questa, right?
 9
               That was on the table?
10
               I wouldn't say Molycorp wanted to invest
     that. There was a joint venture with Kennecott to
11
12
     define the underground resource. And if those
13
    numbers -- if the mining operation were that large,
14
     then that was the numbers.
15
               See otherwise, Molycorp's plan, we had a
16
    parallel plan to do something on our own without a
17
     joint venture with Kennecott. And so I never
18
     envisioned the same plan that Kennecott had.
19
               Okay. So just to unpack that a little
20
    bit, in connection with the thinking about or
21
    planning for the next phase of mining at Questa,
22
    Kennecott came back into the picture again and
23
     actually did enter a partnership agreement with
24
    Molycorp, correct?
25
               Correct. Well, an agreement that could
         Α.
0058
    lead to a partnership, yes, sir.
1
               Okay. Did Kennecott contribute about
```

\$6 million for drilling and exploration related to

```
the Questa Mine?
 5
         Α.
               Yes.
 6
         Q.
               And in 1975, Molycorp owned virtually all
 7
     the land at the Questa Mine in fee simple, correct?
 8
               Correct.
         Α.
9
         Q.
               And do you recall that if Phase 2 of the
10
     partnership with Kennecott was reached, that
11
     Kennecott would essentially acquire the mine lands?
12
               They would acquire 60 percent, if I
13
     remember the number.
14
               Okay.
         Q.
15
               MR. AUGUSTINI: Mr. Hambrick, please show
16
     USX11.
17
               (By Mr. Augustini) Mr. Dewey, do you
18
     remember this geological report, Questa project 1975
     to '77?
19
20
               Yes, I do.
         Α.
21
         Q.
               Yes?
22
         Α.
               Yes, sir.
23
               And this was prepared by Kennecott,
         Q.
24
     correct?
25
         Α.
               Correct.
0059
 1
               Did you receive it as a vice president of
 2
     Molycorp?
 3
               I'm sorry, sir, we are talking too
 4
     quickly.
 5
               Did you receive a copy of this report in
     your capacity as vice president?
 6
 7
         Α.
               Yes, I did.
               As it turned out, UNOCAL acquired Molycorp
 8
         Q.
 9
     in July '77 and --
               August of '77.
10
         Α.
11
         Q.
               August, excuse me.
12
               And the underground mine became a UNOCAL
13
     project at that point, correct?
14
               Not at that point, no, sir.
15
               Rather than proceeding with Kennecott
         Q.
     under the partnership, as it turned out the
16
17
     underground mine was developed under UNOCAL,
18
     correct?
19
         Α.
               Correct.
20
               And UNOCAL bought out Kennecott's
21
     partnership interest in the Questa Mine for
22
     $13 million.
23
               Do you recall that?
24
         Α.
               Yes, I do.
25
               MR. AUGUSTINI: Mr. Hambrick, please
0060
     display USX486.
1
               (By Mr. Augustini) Mr. Dewey, I know you
     might not recall this specific letter at the moment,
```

```
but do you see your name on the letterhead at the
 5
     top of this exhibit?
 6
         Α.
               Yes.
 7
               And the date is February 1979?
         Q.
 8
         Α.
               Yes, sir.
 9
               MR. AUGUSTINI: Your Honor, I move to
10
     admit USX486.
11
               THE COURT: Without objections, 486 is
12
     admitted.
13
               (Exhibit admitted, USX486.)
14
              (By Mr. Augustini) Is this a letter, sir,
15
     that you sent to your counterpart at Kennecott in
     1979?
16
17
               He was not a counterpart, he was the
18
     individual, the head of the exploration group at
19
     Bear Creek Mining.
               And that would be Mr. Van Voorhis?
20
         Q.
21
         Α.
               Van Voorhis.
22
               And do you recall your letter generally
23
     commends the Kennecott geologists who came and
24
     assisted Molycorp with exploration and
25
     predevelopment work for the underground mine?
0061
 1
               Would you repeat the question?
         Α.
 2
               We can look at the language, but do you
 3
     recall this letter was complimentary of the
 4
     professionalism and caliber of the Kennecott people
     who came to the Questa Mine and worked with you-all?
               The basic purpose of this letter was I was
 6
 7
     objecting to their writing a report, taking all the
     credit for what was involved, and there were some
 9
     definitely complimentary comments in the letter,
10
     yes.
11
         Q.
               Sure.
12
               So, for example, you -- I guess the
13
     positive is, "I recognized that they made a major
14
     contribution during the two years they were on the
15
     project."
16
               That is referring to the Kennecott
17
     geologists, correct?
18
               Correct.
         Α.
19
         Q.
               So although the partnership didn't come to
     full fruition, Molycorp's relationship with
20
     Kennecott ended on good terms, correct?
21
22
         Α.
               Ended up what?
23
         Q.
               On good terms?
               Yes, I would say certainly on business
24
         Α.
25
     terms.
0062
1
         Q.
               Exactly.
 2
         Α.
               Yeah.
 3
         Q.
               Okay. Mr. Dewey, changing subjects, as a
```

```
former executive, you're familiar with the ownership
 5
     history of the Questa Mine?
 6
               THE COURT: Counsel?
 7
               MR. HOPSON: Yes, Your Honor, if we are
 8
     changing subjects, might this be a good time to take
 9
     a short break?
10
               MR. AUGUSTINI: Yes.
11
               THE COURT: Okay. 10-minute break.
12
               (A recess was taken.)
13
               THE COURT: You may be seated.
14
               Counsel, you may proceed.
15
               MR. AUGUSTINI: Thank you.
16
               Your Honor, I neglected to move the entry
17
     of CX130, it's the Chemical Bank memos that we
18
     discussed and --
               MR. HOPSON: No objection, Your Honor.
19
20
               THE COURT: Without objection, 130 is
21
     admitted.
               (Exhibit admitted, CX130.)
22
23
              (By Mr. Augustini) Mr. Dewey, Molycorp
24
     acquired fee title to several hundred acres of land
25
     at the Questa Mine in the 1920s and the 1930s; is
0063
 1
     that right?
 2
               Yes, sir.
         Α.
 3
               And that was the land on which Molycorp
         Ο.
 4
     developed the open pit, correct?
 5
               Correct.
 6
               MR. AUGUSTINI: Mr. Hambrick, please
 7
     display CX453.
 8
               (By Mr. Augustini) Mr. Dewey, this is an
 9
     Exhibit prepared by one of Chevron's witnesses, Dr.
10
     Haddad.
               And if you zoom in, you can see dates and
11
12
     boundaries.
13
               Do you have a general understanding of the
14
     coverage of the patents that Molycorp obtained over
15
     time?
               Yes, sir.
16
         Α.
17
               MR. AUGUSTINI: Mr. Hambrick, please
18
     display the next version of this exhibit.
19
               And on this, just for ease of reference,
20
     we have shaded the area that is encompassed by
21
     Molycorp's patents in the 1920s and '30s.
22
         Q.
               (By Mr. Augustini) Do you see that,
23
     Mr. Dewey?
24
         Α.
               That is the yellow area that says "Land
25
     Patent"?
0064
         Q.
               Yes, sir.
1
 2
         Α.
               Yes, sir.
 3
         Q.
               And within the yellow area, if you see the
```

photo behind it, is the open pit location, correct?

```
5
         Α.
               Yes, sir.
 6
         Q.
               And owning the land that encompassed the
 7
     open pit was important to Molycorp in terms of being
 8
     able to obtain financing from banks; is that right?
               Having control of the land, yes, sir.
 9
10
     Yes, sir.
               Yes.
11
               They wanted to know that you will be able
         Q.
12
     to conduct your mining operations before they loan
     you tens of millions of dollars, generally, correct?
13
14
               That is the concern?
15
         Α.
16
               And the open pit was the source of the
17
     molybdenum of the mining company in the 1960s and
18
     '70s, correct?
19
         Α.
               Correct.
20
         Q.
               And the open pit was the waste rock that
21
     was dumped on the ground surface at the Questa Mine,
22
     correct?
23
               Right.
         Α.
24
         Ο.
               And once the mining was underway, the open
25
     pit's geology became a source of some significant
0065
 1
     operational problems for Molycorp; is that right?
 2
         Α.
               Yes.
 3
               MR. AUGUSTINI: Please display CX365.
 4
               (By Mr. Augustini) Mr. Dewey, this is an
 5
     e-mail, if you see the "From Tom Couzens, Colorado
 6
     Springs."
 7
               Is that how you say his name?
 8
         Α.
               Yes.
9
               Are you familiar with Mr. Couzens?
         Q.
10
         Α.
               Yes, sir.
               What was his role in Molycorp?
11
         Ο.
12
         Α.
               Chief pit engineer.
13
               So he would have extensive familiarity
         Q.
14
     with the open pit operation, correct?
15
               Correct.
         Α.
               MR. AUGUSTINI: Turning to the third page
16
17
     of Mr. Couzens' e-mail, in the top right corner, if
18
     we can blow that up above the picture of Bob Larson.
19
     Above the picture, please. Okay.
               (By Mr. Augustini) Do you see Mr. Couzens
20
21
     states that he and a geologist, Gordon Gumble -- was
22
     he also a Molycorp employee?
23
               Yes.
24
               -- were exploring the back side of the
25
     high west ridge in the summer of '67 and found some
0066
1
     strange depressions?
 2
               Are you familiar with what he is referring
 3
     to, sir?
```

```
Yes, sir.
         Α.
 5
               And is the photo there, of Mr. Larson down
         Q.
     inside of the crack, the evidence of a fault that
 6
 7
     was in the ridge that formed the back wall of the
 8
     open pit?
 9
               It is not evidence of a fault, sir. It is
        Α.
10
     evidence of a karst.
11
               Is it the crust?
         Q.
12
               Evidence of a crack of a karst --
         Α.
13
         Q.
               Oh, okay.
14
         Α.
               -- not evidence of a fault.
15
               Very good.
         Q.
16
               MR. AUGUSTINI: Go down a little bit,
17
     please, Mr. Hambrick.
18
               (By Mr. Augustini) Just below the picture
19
     of the -- on the top left, Mr. Couzens states,
     "There were some small one or two offsets that we
20
21
     realized were scars from tension cracks that had
22
     been there for years, covered by vegetation,
23
     partially healed but still obviously moving a bit."
24
               Is that a fair description of what
25
     Molycorp discovered on the back side of the ridge in
0067
     the summer of '67?
 1
 2
               Yes.
         Α.
 3
               And then he goes on to say, "Wow, we had
         Ο.
     started mining in the middle of a huge failure rock
 4
 5
     that was part of the erosion process of Sulphur
 6
     Gulch."
 7
               That was the situation you encountered in
 8
     the summer of '67?
 9
         Α.
               Would you repeat the question?
10
               This refers to the failure rock being
         Q.
11
     discovered.
12
               Was that the situation Molycorp
13
     encountered in the summer of '67?
14
               Yes.
15
               Did Molycorp not know there was a fault in
         Q.
16
     the back pit wall when it decided to do the open pit
17
     mine?
18
               Again, in 1971, we employed then one of
19
     the world's best geotechnical experts, and they
     determined that this -- these tension cracks, this
20
21
     filled ground, was a result of the geology in that
22
     back wall.
23
               No fault was ever identified as such.
     This, in their opinion, was a result of weaker
25
     ground about halfway down through the mountain,
0068
1
    Golder Browne & Associates.
               And that weaker ground allowed the upper
     portion of the mountain to collapse, start to
```

```
collapse.
 5
         Q.
               I apologize with my terminology.
 6
               He refers to it as a fault but it is not
 7
     important.
 8
               But the question was, was Molycorp aware
9
     of this, these tension cracks or weaker ground, as
10
     you described, before deciding to develop the open
11
     pit?
12
               No, I don't believe they were.
13
         Q.
               And because of that, Molycorp's pit design
14
     called for a relatively steep slope in the pit wall,
15
     correct?
16
               The design was a conventional design that
         Α.
17
     all mines are initially trying to achieve.
18
               And then the -- as it turned out, the
19
     conventional design was to steep given the weakness
20
     in the ground, correct?
21
               In that particular portion of the pit
22
     wall, yes, sir.
23
               In the development of the pit, the initial
         Q.
24
     activities of stripping and blasting, that
25
     exacerbated the weakness in the portion of the pit
0069
     wall, correct?
1
 2
        Α.
              Correct.
 3
               Mr. Couzens states that "This area came to
         Ο.
 4
    be known as Quivering Ridge."
 5
               Is that a name you ever heard at Molycorp?
               It is probably something that was passed
 6
 7
     around in the engineering department. I don't
     remember other than this report.
9
               Once the problem was detected, this was
10
     something that Molycorp had to monitor very
11
     carefully, correct?
12
               The initial monitoring was very crude.
13
     involved a couple of stakes in the ground and a
14
     piece of wooden lath.
15
               And the foremen were asked to go up and
16
     make a pencil mark so they could try to determine if
17
     there was any movement, and if so, how much. And --
18
     but that, I wouldn't call it extensive.
19
               It is certainly something that in the
     interest of the safety of the mining personnel and
20
21
     the equipment that would be tracked by Molycorp,
22
     correct?
23
         Α.
               Correct.
               MR. AUGUSTINI: Mr. Hambrick, please
24
25
     display CX240.
0070
1
               (By Mr. Augustini) Mr. Dewey, the title at
     the top, the letterhead is -- references Anaconda
 3
     Company.
```

```
Is that a mining company?
 5
         Α.
               Yes, sir.
 6
         Q.
               And the date is June 12, 1970?
 7
               Yes.
         Α.
 8
               And in the first full paragraph, there is
         Ο.
 9
     a reference to a meeting that included you and other
10
     Molycorp personnel, as well as Anaconda, correct?
11
         Α.
               Correct.
12
               MR. AUGUSTINI: Your Honor, I move to
13
     admit CX240.
14
               MR. HOPSON: No objection, Your Honor.
15
               THE COURT: No objection, it is admitted.
16
               (Exhibit admitted, CX240.)
17
               THE COURT: Are CX153 and 136 already
18
     admitted?
               MR. AUGUSTINI: I believe so, Your Honor.
19
20
               Thank you.
21
              (By Mr. Augustini) Mr. Couzens was also at
22
     this meeting with Anaconda, according to the memo?
23
               Yes, sir.
         Α.
24
         Ο.
               So did Molycorp invite Anaconda in to
25
     advise them of the pit instability issue?
0071
 1
               Yes. They had a similar issue going on at
 2
     the time, and they had some experience with --
 3
     pre-dated our experience.
 4
               MR. AUGUSTINI: If we can blow up,
 5
     Mr. Hambrick, the very bottom.
               (By Mr. Augustini) Anaconda notes, at the
 6
 7
     bottom here, that "The slide problem at the Questa
 8
     Mine is of special interest, in part, because the
 9
     magnitude, 50 million tons of the slide, is as large
10
     or larger than any that have been known to exist in
11
     an open pit mine."
12
               Is that a correct assessment of the
13
     problem that Molycorp encountered in the late '60s,
14
     early '70s?
15
             No. In fact, when they ultimately had
16
     their slide at Twin Boots, significantly larger than
17
     that.
18
               Just six or seven years ago, in the
19
     largest open pit in the world that you mentioned,
20
     they had a slide with the magnitude of well over
21
     100 million tons.
22
               So this -- yeah, this was one man's
23
     opinion of what this potential might be.
24
               It turns out, his estimate was, in fact,
25
     accurate when we did finally have a catastrophic
0072
     failure in 1977. The approximate estimate of debris
1
     involved in that failure was 50 million tons.
 3
         Q.
              I see.
```

```
So just in -- general speaking, there is
 5
     no question that the pit wall instability was a big
 6
     problem that Molycorp had to address to continue
 7
     open pit mining, right?
 8
               Changed the whole paradigm, yes, sir.
         Α.
 9
         Q.
10
               MR. AUGUSTINI: Mr. Hambrick, please
11
     display CX131.
12
               (By Mr. Augustini) Mr. Dewey, there is a
13
     handwritten note on the cover page, "Original
14
     Feasibility Study."
15
               Do you see that?
16
               Yes, I do.
         Α.
17
               And in your written testimony, you noted
18
     that the original mining plan for the pit
     involved -- planned for a two-to-one waste-to-ore
19
     ratio; is that right?
20
21
         Α.
               Correct.
22
         Ο.
               In other words, Molycorp planned to
23
     generate and dispose of 2 tons of waste rock from
24
     the pit for every 1 ton of ore that was provided to
25
     the mill, right?
0073
 1
               Yes, sir.
         Α.
 2
               And Molycorp had to maintain an efficient
 3
     ore-to-waste ratio in order to continue to draw the
 4
     bank funds and pay back the money it had borrowed
 5
     from the banks to operate the pit, correct?
               Very definitely.
 6
         Α.
 7
               So the whole idea of the mining plan was
         Q.
     to produce sufficient or to generate the cash flow
 8
 9
     needed to pay all expenses and repay the loans,
10
     right?
11
         Α.
               Correct.
12
               MR. AUGUSTINI: Let's turn to page 96 of
13
     CX131, please.
14
               (By Mr. Augustini) One of the issues that
15
     the Molycorp feasibility study for the open pit mine
16
     had to address was what to do with the waste rock,
17
     correct?
18
         Α.
               Correct.
19
         Q.
               And is this table indicating that the
20
     original plan was to generate approximately
21
     31 million tons of waste rock?
22
         Α.
               That is correct.
23
               I'm sorry, I think I misspoke, Mr. Dewey.
         Q.
               I believe the table references cubic
24
25
     yards?
0074
1
               I stand corrected as well.
                                            Thank you.
         Α.
 2
         Ο.
               Yes, that is my mistake.
```

Do you have an approximation for how that

3

```
converts to tons at all?
 5
               1.7 tons to a cubic yard.
 6
               And in our case, it varies depending upon
 7
     the propensity of the rock.
 8
              Yeah, that's what I was figuring for that
     roughly 55 million tons, total.
9
10
               And according to the waste-dump areas
11
     section that is just below there, there is a
12
     reference to various waste dumps, correct?
13
               Yes.
14
         Q.
               And then the total capacity is listed in
15
     that table, correct?
16
               Correct.
        Α.
17
               And it is 68 million tons -- cubic yards,
18
     excuse me, approximately, correct?
19
         Α.
               Correct.
20
               So this feasibility study indicates that
         Q.
21
     the dump capacity at the time the open pit was to
     begin was more than sufficient to accommodate the
23
     31 million cubic yards of waste expected, correct?
24
         Α.
               Correct.
25
         Q.
               But then with the pit wall, it became
0075
     clear that the original mining plan was no longer
 1
 2
     doable, right?
 3
         Α.
               Yes.
 4
               You testified at your deposition, in 1968
 5
     and '69, you were working night and day to find a
     financially-viable way to continue with the open pit
 6
 7
     mining, correct?
 8
         Α.
               Correct.
9
               And I think the term you used at your
     deposition was that the solution involved generating
10
     tremendous amounts of waste rock compared to the
11
12
     original plan?
13
         Α.
               Right.
14
               And to put some quantification on it, the
15
     waste-to-ore ratio went from two-to-one in the
16
     original plan to roughly ten-to-one; is that right?
17
              At times ten-to-one, the overall ratio was
         Α.
18
     a little less than ten-to-one.
19
               So the revised mining plan would generate
     somewhere between four, roughly four times more than
20
21
     originally expected, correct?
22
         Α.
               Yes.
23
               And that is why the total waste generated
         Ο.
     by the open pit mine eventually was so much higher,
25
     correct?
0076
1
```

Α. Correct.

And the increased cost of handling the waste rock that was necessary to flatten the pit

```
slope, that had to be offset by increased revenue,
 5
     correct?
 6
         Α.
               Correct.
 7
               Revenue had to cover the increased costs.
         Ο.
 8
               And so did that mean that Molycorp had to
 9
     expand its mill operation?
               Yes, sir.
10
         Α.
11
         Q.
               And that meant that additional tailings
     would be generated and disposed at the offsite
12
13
     location, correct?
14
         Α.
               Right.
15
               MR. AUGUSTINI: Mr. Hambrick, USX016,
16
    please.
17
               (By Mr. Augustini) Mr. Dewey, we displayed
18
     USX016, the title page, "Molycorp Questa Expansion
     Proposal, August 28, 1968."
19
20
               Do you see that?
21
         Α.
               Yes, sir.
22
         Q.
               Mr. Lansing is down at the bottom.
23
               He was a senior executive at Molycorp?
24
         Α.
               He was the general manager.
25
         Q.
               Did you work on the Questa expansion
0077
    proposal?
 1
 2
               Yes, sir.
        Α.
 3
               MR. AUGUSTINI: Your Honor, I move to
 4
     admit USX016.
 5
               MR. HOPSON: No objection, Your Honor.
               THE COURT: Without objection, admitted.
 6
 7
               (Exhibit admitted, USX016.)
              (By Mr. Augustini) Was this proposal
 8
9
     prepared in response to the problems found in the
    back wall of the pit?
10
11
        Α.
               Yes.
               MR. AUGUSTINI: If we turn to the fourth
12
13
     page, Mr. Hambrick.
14
               (By Mr. Augustini) There is a table there.
15
               This proposal, Mr. Dewey, quantifies the
     tonnage of additional waste that would be generated
16
17
     under the revised plan for the open pit; is that
18
     right?
19
               That is correct, sir.
         Α.
               219 million tons, roughly, according to
20
21
     the total in the table -- oh, I'm sorry, 210.
22
        Α.
               Ten, yes.
23
               And the cost associated with that waste
     handling would be a little bit more than
25
     $25 million; is that right?
0078
1
               Yes, sir.
         Α.
               And even in light of the additional cost
         Ο.
     from the waste-rock handling and disposal, the
```

```
company still developed a plan that it projected
 5
     would be profitable in the long run, correct?
 6
               That is correct.
 7
               MR. AUGUSTINI: Mr. Hambrick, please
 8
     display USX583.
               (By Mr. Augustini) Mr. Dewey, do you see
9
10
     that the upper right-hand corner references Utah
11
     Construction & Mining Co.?
12
         Α.
               Yes, sir.
13
         Q.
               Are you familiar with that company?
14
         Α.
               Yes, sir.
15
               Were they a consultant for Molycorp?
         Ο.
        Α.
16
               Yes, sir.
17
               MR. AUGUSTINI: I move to admit USX583.
18
               MR. HOPSON: No objection, Your Honor.
19
               THE COURT: Without objection, 583 is
20
     admitted.
21
               (Exhibit admitted, USX583.)
22
              (By Mr. Augustini) Did you use Utah's --
     you mentioned Fluor -- Fluor Utah Construction in
23
24
     your direct testimony.
25
               Is that the same company we are talking
0079
 1
     about?
 2
               Yes, it is.
         Α.
               They are based in San Francisco?
 3
         Ο.
               Correct.
 4
         Α.
 5
               Did you use Utah Construction's work to
         Q.
     develop the revised feasibility study?
 6
 7
               Yes, we did, both from an engineering
 8
     standpoint and, ultimately, it was one of the first
 9
     companies we were able to get these feasibility
     studies, that I was doing by hand, computerized.
10
               MR. AUGUSTINI: If we could pull out a
11
12
     bit, Mr. Hambrick.
               (By Mr. Augustini) Mr. Dewey, there is a
13
14
     column for "Bench," correct, on the left-hand side?
15
               That is correct.
         Α.
               And does that refer to the elevations
16
         Q.
17
     within the pit?
18
         Α.
               Yes.
19
               And then there is a column for "Waste
         Q.
     Tons, " second from the right, correct?
20
21
               Yes.
22
               Does that refer to the amount of waste at
         Q.
23
     that elevation that would be generated under the
     revised mining plan?
25
               Yes, sir.
         Α.
0800
               And can you explain -- there is no ore in
1
     the ore column from 10,160 feet down to 9,000 feet.
               Can you explain what was going on there,
```

```
please?
 5
         Α.
               Yes.
 6
               If you envisioned this ore deposit as an
 7
     elongated watermelon, and it is dipping down under
     this 10,000-foot high mountain at a 22-degree angle,
 8
 9
     we started at the top of the mountain and sliced the
     slice -- sliced down, took approximately five years
10
11
     to remove enough waste to expose approximately a
12
     year-and-a-half worth of ore.
               So we had three contiguous slices coming
13
14
     down the mountain, and these tons reflected the
15
     total on that level.
16
               So in other words, to take the weight off
         Q.
17
     of the weak ground that is below, I know it is
18
     imprecise, but essentially, the plan was to remove
19
     part of the ridge above the weak ground; is that
20
     generally correct?
21
               That is the whole reason for going to the
22
     top of the mountain, yes, sir.
23
               And you testified at your deposition --
24
     well, one further question on this.
25
               The fact that so much waste had to be
0081
 1
     removed before you get to the ore, that put a lot of
 2
     financial strain on Molycorp, correct?
 3
         Α.
               Correct.
 4
         Q.
               And you testified that -- at your
 5
     deposition, you remembered going to New York
     headquarters in the summer of '69 to obtain approval
 6
 7
     for the revised plan; is that right?
 8
         Α.
               Yes, sir.
 9
               And ultimately, Molycorp's executives and
10
     board of directors made the call to proceed with the
     Utah construction plan; is that right?
11
12
         Α.
               Yes.
13
               And to sum it up, Molycorp did what is
14
     necessary to protect its sizable investment in the
15
     pit up through that point, correct?
16
               It was either that or declare bankruptcy,
17
     which was not an option.
18
         Q.
               Yes.
19
         Α.
               We had -- the entire Northern New Mexico
     was dependent upon that mine and to walk away from
20
21
     it at that point in time, the lives of thousands of
22
     people would have been impacted in a very negative
23
               And it was as much of a consideration of
24
25
     taking this gamble as anything, we felt.
0082
1
         Q.
               Sure.
 2
               And that was Molycorp's decision to
     proceed, correct?
```

```
Yes, it was.
         Α.
 5
         Q.
               Now, you mentioned when all of this
 6
     additional waste is generated under the revised
 7
     mining plan, that creates a problem with respect to
 8
     dump space, right?
9
         Α.
               Major problem.
10
               Do you recall that one of the options
         Q.
11
     Molycorp considered was obtaining a special use
12
     permit to locate the waste rock on patented claims?
13
               That was discussed, yes, sir.
               MR. AUGUSTINI: Mr. Hambrick, please
14
15
     display CX179.
16
               (By Mr. Augustini) Mr. Dewey, do you
17
     recall an engineer by the name of W.K. Pincock?
18
               Yes. He was the chief engineer at that
19
     time.
20
               And this time referenced in this exhibit
         Q.
21
     is June 6, 1967, correct?
22
               June 6, yes.
               MR. AUGUSTINI: And just down to the very
23
24
     bottom of the document, please.
25
               (By Mr. Augustini) Mr. Pincock advises of
0083
 1
     Mr. Lansing in this memo that "Long-range plans are
 2
     in progress with respect to tailings area and dump
 3
     room. We are currently working toward a long-range
     special use permit from the Forest Service."
 4
 5
               So is that consistent with your
     recollection, that was one of the options in the
 6
 7
     late '60s?
 8
               Yes.
         Α.
9
         Q.
10
               MR. AUGUSTINI: Mr. Hambrick, please
11
     display CX204.
12
               (By Mr. Augustini) Mr. Dewey, you
     mentioned, in your direct testimony, John Watson,
13
14
     Watson & Watson law firm.
15
               Was that Molycorp's counsel?
16
         Α.
               Yes, sir.
17
               And the date of this letter is July 26,
         Q.
18
     1968.
19
               Do you see that, sir?
20
         Α.
               Yes, that is correct.
21
               And then in the first sentence, Mr. Watson
         Q.
22
     references a conversation he had with Mr. Kentro
23
     regarding acquisition of dump areas, right?
24
         Α.
               Yes.
25
               So this goes back to the need to find
         Q.
0084
     space for the waste rock under the revised plan,
1
 2
     right?
 3
         Α.
               It is in the same time frame.
```

- MR. AUGUSTINI: Turning to the second -top of the second page, please. If you could blow up the first paragraph.
- (By Mr. Augustini) Do you see the sentence where Mr. Watson advises he is reluctant to recommend the special use permit approach to Molycorp?
 - Α. I guess I see that sentence, sir.
- And one of the problems he mentions with a special use permit is the company could be subject to some kind of future regulation from the Forest Service, right?
- Not only future but current. They could Α. withdraw it at any time.
- So that is why it is -- special use permits might be viewed as less desirable than owning the land outright, correct?
 - Α. Correct.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

3

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6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

MR. AUGUSTINI: Scroll down, please, Mr. Hambrick.

(By Mr. Augustini) With respect to mill 24 25 sites, Mr. Dewey, were you aware -- were you aware 0085

1 that Molycorp would have to demonstrate some use of 2 the land --

- Α. Yes.
- Q. Before obtaining ownership of a mill site 5 claim?
 - Α. Yes, sir.
 - Were you also aware that if Molycorp wanted to obtain fee title to the land that was covered by a mill site, that the statute, the mining law, required those patents to be limited to just 5 acres; is that your recollection?
 - Α. Yes.
 - So if Molycorp wanted to obtain 50 acres Q. for waste-rock dump purposes or any other purposes through a mill site patent, that can't be done, correct, in one patent because you are limited to 5 acres?
 - Each individual claim is limited to Α. 5 acres, yes, sir.
 - So if you have your eyes on a 50-acre section of land that you would like to use, you can't take ownership of it all under one mill site patent, right, because of the 5-acre limitation?
- 24 The -- Ed Torgerson, the chief engineer, Α. 25 devised a plan that worked around that issue by 0086
- 1 stacking mill-site claims, one next to the other,
- and having the extension of the claim long enough to
- cover what was going to be used.

```
And we staked such claims in Capulin
 5
     Canyon.
 6
               Well, yes, Mr. Dewey, but one thing is
         Ο.
 7
     clear, if you are planning to dispose of a large
 8
     quantity of waste rock, you don't want to be limited
     to 5-acre increments, correct?
9
10
         Α.
               Right.
11
               As I said, he had a -- he had a plan on
12
    paper which -- on paper and the field that
     accomplished that objective by narrow 2-foot wide by
13
14
     2,000-foot long claims, one after the other, in a
15
    fan shape or whatever was required, and encompassed
16
    that entire canyon.
17
               Okay. But you do understand that use
18
    would have to be demonstrated. You can't obtain
19
    ownership for land that you may use in the future,
20
    correct?
21
               You have to demonstrate a current use.
22
               Is that your understanding?
               Yes, that is correct.
23
         Α.
24
               Okay. Molycorp was interested in
25
     acquiring space for the future use for waste-dumping
0087
 1
    purposes, correct?
 2
         Α.
              Correct.
 3
              And there was a meeting in January of 1969
         Ο.
    with the Forest Service to discuss how that might be
 4
    possible, correct?
 6
         Α.
               Correct.
 7
         Q.
               During that meeting, Molycorp raised the
 8
     idea of possibly using the Red River Valley itself
9
     as a waste-dump location, correct?
              Using the Red River Valley for waste rock
10
     to access the south side of the highway, yes, sir.
11
12
               But there would be substantial quantities
13
     of waste sitting within the Red River Valley
14
     floodplain under this concept, correct?
15
               That is enough waste to create a
         Α.
16
     right-of-way over.
               Right across the river and over to the
17
         Q.
18
     Carson National Forest on the other side.
               Exactly.
19
20
              And you didn't attend the meeting in
21
    January of 1969 but you certainly were aware of it
22
     and heard about it, correct?
23
         Α.
               Correct.
               This concept would have required shutting
24
         Q.
25
     down and relocating the state highway that ran
0088
    around the mine?
 1
              Shutting down the state highway?
 3
         Q.
               Yeah, relocating it, if there is going to
```

```
be a waste pile that stretches across the canyon?
 5
               Relocated? I don't think necessarily it
 6
    would have entailed shutting it down for any period
 7
    of time.
               Did Molycorp present this idea to anyone
 8
9
     other than the Forest Service at that one meeting?
               I think there is a reference earlier by
10
11
     forester, head forester John Hart in some
12
     memorandums I have seen from John Hart, seem to
     indicate that John was aware of the plan.
13
14
               We had a very close relationship with him,
15
    and Al Greslin would stop by and have coffee at the
16
    ranger station and so on.
17
               So I don't know this personally but from
18
    what I read, I believe there was some pre-knowledge
19
    on at least the part of the head forester of Carson
20
    National Forest, John Hart.
21
         Q.
              Before the January '69 meeting?
22
         Α.
               Right.
23
              How about the State of New Mexico
         Q.
     agencies, any communications, discussions of the
24
25
     idea with them?
0089
 1
               Not that I am aware of.
         Α.
 2
               The tailings pipelines that connected the
    mill to the disposal area offsite, those would also
 3
    have to be addressed under this proposal, correct,
    because they run along the road?
               Yeah, that is probably a three-day job.
 6
         Α.
 7
               Okay. But up to -- before January '69,
         Q.
    the tailings pipelines had attracted negative
 8
 9
    publicity?
10
               Without getting into the specifics of it,
    there were concerns about the pipelines before that,
11
12
     correct?
        A. That is correct.
13
14
         Q.
               Environmental concerns?
15
         Α.
               Yes.
16
               Did Molycorp do any outreach to the
         Ο.
17
    public, all the people that recreate in the area,
18
     about this plan?
19
               MR. HOPSON: Objection, Your Honor.
20
    Assumes facts not in evidence regarding "all the
21
    people who recreate."
2.2
               THE COURT: I'm sorry, I can't understand
23
     what you just said.
               MR. AUGUSTINI: I will rephrase,
24
25
     Your Honor.
0090
               THE COURT: Pardon?
1
 2
               MR. AUGUSTINI: I will rephrase my
   question.
```

```
THE COURT: All right. Thank you.
 5
              (By Mr. Augustini) Did Molycorp do any
 6
     outreach to the public about this concept?
 7
               No, not that I am aware of.
 8
               You mentioned Al Greslin was involved in
         Q.
 9
     this.
               Did you hear from him, after the meeting,
10
11
     that there was a way in which Molycorp could obtain
12
     ownership of the land it needed to continue the
     disposal mining and disposal of the waste rock?
13
14
               He, along with Lansing, the general
15
     manager, who probably heard it first from Lansing,
16
     because we rode to work and back every day together,
17
     explained that the idea was rejected out of hand,
18
     more or less, by the Albuquerque officials and
19
     somebody threw out the idea of a land exchange.
20
               So the land exchange will give the
21
     Molycorp ownership of the land it needs for the
22
     dumps, correct?
23
        Α.
               No.
24
               Land exchange -- land exchange would give
25
     Molycorp a place to put that dump immediately, which
0091
 1
     is what was required. We had to have a place right
 2
     now.
 3
               But it was not -- the land exchange is the
 4
     reason we are here today.
 5
               If we would have been able to go across
 6
     that highway and put this waste where they wanted to
 7
     put it, there would not be 350,000 -- million tons
 8
     there.
 9
               We talked about the dump planning. All
     the dump planning that was done was to try to figure
10
     out how to get all of this waste in this limited
11
12
     hillside.
13
               If we'd had had a road going across, as we
14
     envisioned, to those big canyons on the other side,
15
     it would be an entirely different situation.
16
               But nevertheless, you said there was an
17
     immediate need for space now.
18
               Do you remember that?
19
         Α.
               Either that, or shut down.
20
               You weren't going to shut down, correct?
         Q.
21
               We had made a decision not to, if we could
         Α.
22
     help it.
23
               So when the Forest Service made this
         Q.
24
     suggestion, the company embraced it, correct?
25
               That is correct.
         Α.
0092
1
               And you testified at your deposition,
     within a few weeks of the meeting, Al Greslin had
     found a suitable parcel of land adjacent to the
```

```
Carson National Forest that the company could offer
 5
     to the Forest Service to trade, right?
 6
               That was my testimony. That was my
 7
     understanding, at the time.
 8
               I think I have since learned the
     acquisition of those parcels predated that meeting.
 9
10
               We will get to that in just a second.
11
               So what you are saying now is the company
12
     had already identified land that could be traded
13
     with the Forest Service years before this meeting in
14
     1969, correct?
15
               I believe that Forest Service identified
         Α.
16
     those parcels and very specifically wanted that land
17
     because the hippies were encroaching upon the
18
     National Forest and that those parcels were
19
     complicated land surveys and so on.
20
               My view that during the feasibility
21
     studies in the early '60s, when they were doing all
22
     the planning, as you pointed out, to come up with
23
     land, the possibility of land exchanges were
24
     discussed, and foresters identified those two
25
     parcels.
0093
 1
               Al Greslin, that was his job to get leases
 2
     for tailings land, for right-of-ways, whatever, and
 3
     so he acquired that property at that time.
               MR. AUGUSTINI: So let's take a look at
 4
 5
    USX587. We will bring this into focus perhaps.
               (By Mr. Augustini) Mr. Dewey, do you
 6
 7
     recognize this option agreement between, would you
     say Raels and Gaillours --
9
               Yes, sir.
         Α.
10
         Q.
               -- and Molycorp?
            Yes, sir.
And the d
11
         Α.
12
         Q.
               And the date is February 21, 1964?
13
         Α.
               Yes, sir.
14
               So this is five years, approximately,
15
    before the January, 1969 meeting with the Forest
16
     Service?
17
         Α.
               Correct.
18
               And is it your understanding then that
19
     this is the option agreement for the La Lama Land?
20
        Α.
               Correct.
21
               And the La Lama Land was the parcel that
         Ο.
22
    Molycorp ended up offering to the Forest Service for
23
     the land exchange, correct?
               Actually, two parcels.
24
        Α.
25
               Two parcels, correct?
         Q.
0094
1
               And the option agreement itself states
     that the purpose of it was to trade, trade the land
     to the Forest Service for some potential use in the
```

```
future, right?
 5
               That is correct.
         Α.
 6
               It wasn't necessarily for the land
 7
     exchange in mind at the time but you knew that you
     might have a need to do a land exchange with the
 8
     Forest Service at some point in connection with your
 9
10
     operation, correct?
11
               Yes, sir.
         Α.
12
         Q.
               Okay.
               MR. AUGUSTINI: And let's turn to CX212.
13
14
               (By Mr. Augustini) Mr. Dewey, again, you
15
     see the letterhead from the Watson & Watson law
16
     firm?
17
               Yes, sir.
         Α.
18
               And the date is February 20, 1969?
         Q.
19
         Α.
               Yes.
               The letter is sent to Mr. Taylor at the
20
         Q.
21
     Forest Service, correct?
22
         Α.
               Correct.
23
               And in the first sentence, Mr. Watson
         Q.
     states, "I have been authorized by Mr. Lansing,
24
25
     manager of the Molybdenum Corporation Mine in
0095
 1
     Questa, New Mexico, to make application to you on
 2
     behalf of the corporation for the exchange of the
 3
     land designated as parcel one and parcel two on the
     enclosed map."
 4
 5
               Correct?
 6
         Α.
               Correct.
 7
               So within three weeks of the meeting, the
 8
     company's attorney is sending a letter to the Forest
9
     Service saying we would like to apply for the land
     exchange, correct?
10
11
         Α.
               Right.
12
         Ο.
               And from that point forward, you testified
13
     at your deposition, under the revised mining plan,
14
     Molycorp's cost calculations took into account the
15
     fact that the land exchange would come to fruition;
16
     is that right?
17
               That's correct.
         Α.
18
               So, based on the meeting, Molycorp assumed
19
     that it would become the owner of all the land that
20
     was subject to the exchange, correct?
21
         Α.
               Correct.
22
         Q.
               And that took -- it took a while but
23
     that's what came to pass, correct?
24
        Α.
               Correct.
25
               MR. AUGUSTINI: Let's turn to CX248,
0096
1
   please.
               (By Mr. Augustini) Mr. Dewey, do you
   recognize the name C.A. Campbell?
```

```
Yes, I do.
         Α.
               And was he the president of Molycorp?
 5
         Q.
 6
         Α.
               No. He was a -- he was hired sometime
 7
     around early 1970 from International Mining in
     Canada, as general manager.
 8
9
               The general manager of the mine that hired
10
     me resigned and for a period of about four or
11
     five months, between September and December of 1969,
12
     I was the acting manager.
               And we were looking for somebody to
13
14
     replace the position of general manager, and Colin
15
     Campbell was hired for that position.
16
               So at the time of this memo, he is likely
         Q.
17
     to be the general manager at Questa Mine?
18
               He definitely was.
         Α.
19
               And Mr. Torgerson, again, was part of the
         Q.
20
     engineering department?
21
         Α.
               Yes, sir.
22
         Ο.
               And do you understand this memo to be
23
     providing an estimate for the costs if Molycorp were
24
     to obtain mill sites for the land covered by the
25
     exchange?
0097
 1
               Yes, sir.
         Α.
 2
               And again, he is referencing in this
         Q.
 3
     5-acre mill site claim?
 4
         Α.
               Correct.
 5
               And to cover 2,000-plus acres, or I guess
         Q.
     not all but -- just to step back for a second, the
 6
 7
     land exchange covered over 2,000 acres, correct?
               Yes.
 8
         Α.
9
               That is what Molycorp acquired?
         Q.
10
         Α.
               Yes, sir.
               And there was never any intention to use
11
12
     all of the 2,000-plus acres for waste dumping,
13
     correct?
14
         Α.
               Just a portion.
15
         Q.
               Yeah.
16
               Just to get across the highway to the
         Α.
17
     other side.
18
               Now, excuse me, Mr. Dewey, the 2,000 acres
19
     acquired from the Forest Service or the
     United States, for the -- for the land exchange,
20
     some of that would be used for dumping waste rock
21
22
     but most of it was other land, correct?
23
               No. If you look at the photographs you
     showed earlier, all of the dumps along the north
24
25
     side of the highway start from Sugar Shack to the
0098
1
     extreme south and worked their way across that
 2
     entire area.
               Now, I don't know that --
 3
```

```
I don't mean to cut you off. I am not
 5
     asking my questions very well.
 6
               There are not waste rock piles on all of
 7
     the 2,000 acres that were acquired, correct?
 8
               I can't honestly answer that. I don't
 9
     know. I would have to look at a survey plat. There
10
     might be a few acres in there that are not covered
11
    by rocks.
12
         Q.
               But part of the land that was acquired
13
     through the exchange, for example, would cover the
14
     surface above the underground mine to the -- to the
15
     right, right?
16
               Right.
                       I believe that's correct, yes.
         Α.
17
         Q.
               Okay.
18
               Yes, it definitely is.
         Α.
19
               All the way up to the western boundary of
         Q.
20
    the mine?
21
        Α.
               Yes, sir.
22
         Ο.
               Now, don't you agree, as an economic
23
     proposition, the price that Molycorp paid for the
24
     Lama Land was quite reasonable given Molycorp's
25
     tremendous needs in 1969 to continue operating the
0099
 1
    open pit and then the thousand of acres that it
 2
     received from the Forest Service in return?
 3
               What was the price of the Lama Land that
 4
     was purchased under the option?
 5
               Something close to $100,000.
 6
         Q.
               And in return, Molycorp received
 7
     2,000-plus acres, correct?
 8
               Yeah. Yes, 2,000-plus acres of
9
    hydrothermally scarred mountain side, yes, sir.
10
               And you were able to continue mining for
11
     another ten-plus years as a result, correct?
12
         Α.
              Correct.
13
               Forest Service didn't extract a profit on
         Q.
14
     the land exchange, correct?
15
               It is an even exchange, intended to be,
16
    right?
17
               THE COURT: Counsel, how does he know what
18
    the Forest Service considered a profit? He would
19
    have no idea.
20
               Move on.
21
               MR. AUGUSTINI: Will do.
22
               Mr. Hambrick, please display CX282.
               (By Mr. Augustini) Mr. Dewey, you
23
     mentioned this document in your direct testimony,
25
     the Molycorp Interim Feasibility Study in February,
0100
    1972?
1
 2
        Α.
               Yes, sir.
 3
         Q.
               And this was for future planning
```

```
post-1976, right?
 5
         Α.
              Correct.
 6
               MR. AUGUSTINI: If we turn to page 34,
 7
    please.
               (By Mr. Augustini) Maybe I will try asking
 8
         Q.
9
     first.
10
               This document involved future planning for
     either another open pit or an underground mine,
11
12
               It is not for another open pit.
13
        Α.
14
    for an existing open pit, to the best of my
15
    recollection.
16
               Well, there was another ore body or ore
         Q.
17
    that was available and the company was considering
18
    what method of mining to use to extract that ore,
19
    correct?
20
               The portion of the over-deposit for the
        Α.
21
    mineral deposit, it was the underground portion.
22
               You know, I was not involved in this
23
    memorandum, I don't believe.
24
               This has to do with what we were doing at
25
    the time.
0101
 1
               All right.
         Q.
 2
               MR. AUGUSTINI: Let's turn to page 20,
 3
    please.
 4
              (By Mr. Augustini) This document,
    Mr. Dewey, references immediately available dumps;
 6
    is that correct?
 7
               Both immediately available and possible
 8
    future?
9
               Yes, A, B and C, correct.
         Α.
               And the immediately available dumps would
10
         Q.
    include the locations that are listed.
11
12
               Those are within the Questa Mine boundary,
13
    correct?
14
              Correct.
        Α.
15
        Q. And the possible future dumps, those don't
     exist yet as of this time, correct?
16
17
               Those are the dumps on the south side of
        Α.
18
    the river.
19
         Q.
              Right.
20
               So they are theoretically available
21
    possibly at some point in the future, right?
22
        A.
               That was our hope.
23
               But as it turned out, the space across the
     river wasn't needed because the second -- the next
25
    phase of mining that Molycorp chose to pursue was an
0102
1
   underground mine, right?
              The underground mine did not require any
    significant amount of waste, that's correct.
```

```
So once that decision was made, the
     company knows its existing capacity within the mine
 6
     isn't going to be a problem because, as I under --
 7
     could you just describe how the block caving process
 8
     works and how that relates to what gets to the mill,
 9
     please?
10
         Α.
               Well, you have asked two questions there.
11
               Can I answer the first one?
12
         Q.
               Let me try it again. I apologize.
               That is all right.
13
         Α.
14
               Under the block caving process, as I
15
     understand it, generally there are grizzlies that
16
     the ore is on top of a grizzly system, it passes
17
     through these grizzlies, it is carted to the mill,
18
     correct, generally?
19
         Α.
               Correct.
20
         Q.
               So everything that is extracted from the
21
     underground mine gets processed and that results in
22
     tailings, correct?
23
         Α.
               Correct.
24
         Ο.
               So the surface disposal is not a factor as
25
     you have mentioned, right?
0103
 1
         Α.
               Correct.
 2
               If we can turn to --
         Q.
 3
               Sir, may I back up to the first statement
         Α.
 4
     you made before you get to the block caving?
 5
               When you said -- could you repeat that?
     Do you remember what you said?
 6
 7
               About the grizzlies?
         Q.
 8
         Α.
               Before the grizzly, before you mentioned
9
     block caving, you mentioned that we had enough land
     for what we needed to do here or something.
10
               It is a simple point, we covered that when
11
12
     it comes to the underground block cave mine, the
13
     surface disposal waste is no issue, correct?
14
               That is all I was getting at.
15
         Α.
               Correct.
16
               MR. AUGUSTINI: Let's turn to page 38 of
17
     the interim feasibility study.
18
               There is a lot here but this section is
19
     entitled "Landownership, Claims, Leases and
20
     Patents."
21
               And then down in the fourth or fifth
22
     paragraph, "recently, several proposals," can you
23
     blow that up, please.
               (By Mr. Augustini) If you would take a
24
25
     minute now -- just take to look at that now,
0104
1
     Mr. Dewey, please.
 2
         Α.
               Yes, I see that.
```

Was one of Molycorp's concerns that there

3

Q.

might be changes in the mining law that would impact

```
5
     its business?
 6
         Α.
               Every mining company in the world.
 7
               And so part of the discussion here in this
 8
     interim feasibility plan for the future mining --
               MR. AUGUSTINI: If we turn to the next
 9
10
     page.
11
               (By Mr. Augustini) -- there is a paragraph
         Q.
12
     that says, "The effects of these measures on
     Molycorp's unpatented claims is readily apparent.
13
14
     The company will not control all the mineral land it
15
     is will need in the Questa Red River area."
16
               And do you see that passage, Mr. Dewey?
17
               Yes, I do.
18
               And then it goes on to say, "It is
         Q.
19
     necessary to proceed with a land exchange."
20
               Correct?
21
               It is necessary to complete that and the
22
     mineral claims in the log cabin area.
               And it continues, "The land exchange in
23
24
     progress with BLM, that would give fee simple title
25
     to an additional 2250 acres on the west side."
0105
 1
               Okay. Yes, I'm sorry I see that, that
         Α.
 2
     2250.
 3
               So in light of this concern about maybe
         Ο.
 4
     the mining law would change this document, the
 5
     Interim Feasibility Study, states that It is very
     important to get the land. That is the subject of
 6
 7
     the land exchange, correct?
 8
         Α.
               Correct.
9
               MR. AUGUSTINI: Let's turn to CX245,
10
     please.
11
               (By Mr. Augustini) Mr. Dewey, you may
     recall, I believe you have mentioned this memorandum
12
     in your direct testimony?
13
14
         Α.
               Yes.
15
         Q.
               Written by John Miller, I believe?
16
         Α.
               Yes, sir.
17
         Q.
               He was one of the engineers on Molycorp's
18
     staff?
19
               Yes, he was.
         Α.
20
              And he mentions his concerns about dump
21
     stability as of December, 1970, correct?
22
               Correct. He was very concerned.
         Α.
23
               I mean -- and just to put some detail on
     that, one of the concerns is certainly that the
25
     waste piles are standing above the state highway,
0106
1
   correct?
        Α.
               Correct.
 3
         Q.
               And so this memo was prepared during the
```

```
time that the company was pursuing the land
 5
     exchange, correct?
 6
         Α.
               This memo, I believe, postdated the
 7
     decision to make the land, yes.
 8
         Q.
               Okay.
9
               MR. AUGUSTINI: Let's show USX482, please.
10
               (By Mr. Augustini) Mr. Dewey, you may
     recognize your signature on this first page of the
11
12
     August 23 memo; is that right?
13
         Α.
               Yes.
14
         Q.
               And this was to Mr. Kostuik?
15
               Kostuik, yes, sir.
        Α.
         Q.
16
               Kostuik.
17
               The subject is "Dump Plans Five Years."
18
        Α.
               Yes, sir.
19
               Molycorp was always looking out into the
         Q.
     future in terms of what it needs maybe for the
20
21
     mining, correct?
22
               Daily, weekly, monthly, five years, it was
23
     a continual process.
24
               And here you ask for Mr. Kostuiks' input
25
     regarding plans for the open pit mine continuing,
0107
1
    correct?
 2
        Α.
               Correct.
 3
               At that time he was the -- had a position
 4
     of vice president and general manager of Molycorp,
 5
     so I reported directly to him.
               And we would spend about a week or so a
 6
 7
     month at the mine, and we would work together to try
 8
     to resolve these kind of issues.
9
               And so if I understand it, you need to
     know what the mine plan is to know how to plan for
10
11
     the future waste handling or dump storage, correct?
12
        Α.
               Correct.
13
               THE COURT: Counsel, is this a good time
14
     to take our noon recess?
15
               MR. AUGUSTINI: Yes, it is, Your Honor.
16
               THE COURT: All right. Let's be in recess
17
     until 1:30.
18
               (A recess was taken.)
19
               THE COURT: You may proceed.
20
               (By Mr. Augustini) Good afternoon,
         Q.
     Mr. Dewey?
21
22
         Α.
               Good afternoon.
23
               MR. AUGUSTINI: Mr. Hambrick, please
24
     display CX281.
25
               (By Mr. Augustini) Mr. Dewey, on your
0108
    direct testimony I believe you also cited the Forest
1
     Services 1972 environmental assessment related to
    the land exchange.
```

```
Do you recall that?
 5
        Α.
               Yes, sir.
               Did you receive a copy of this in 1972?
 6
         Ο.
 7
               Yes.
         Α.
 8
               I would like to turn to the second page of
         Ο.
     CX281. Do you recall that one of the statements in
9
     the environmental assessment had to do with the, one
10
11
     of the rationales was that the exchange would
     facilitate Molycorp's planning and development of
12
13
     the mining dumps?
14
         Α.
               Yes, I do.
15
               And then on Page 6 the environmental
         Q.
16
     assessment notes that in the Forest Service view
17
     Molycorp's mining would continue?
18
              Page 6? I'm sorry, Page 5 is on the
19
     screen. Okay.
20
               The question was about the second sentence
         Q.
21
     there, "The mining activities will still continue on
22
     the patented mining claims or on mill sites and are
23
     not dependent upon the approval or disapproval of
24
     this land exchange proposal."
25
               And that was Molycorp's intention, to
0109
 1
     continue mining one way or the other, correct?
 2
               That was our intention to try to keep the
 3
     mine going, yes, sir.
 4
         Q.
               And Molycorp had been mining from the time
 5
     we saw the February '69 letter that Mr. Watson sent
     applying for the exchange through this point, which
 6
 7
     was 1972, correct?
 8
         Α.
               Correct.
9
               And Molycorp also continued to mine
     between 1972 and 1974 when the land exchange finally
10
     was completed and Molycorp took title to the land,
11
12
     correct?
13
         Α.
               Yes, sir.
14
               If we can move to the PDF Page 8, I
         Q.
15
     believe that would be 7 of the report. There is a
     sentence I will read for the record, Mr. Dewey.
16
17
               "If the company is able to acquire the
18
     entire dump site, it plans to develop it in an
19
     orderly fashion with terraces and enough backfill of
20
     fine material on the surface to permit establishment
21
     of vegetation."
22
               Do you see that passage, sir?
23
         Α.
               Yes, I do.
```

1 A. Yes, sir.

in mind as of 1972?

Q.

24

25

0110

Q. In fact, I believe it is fair to say you took somewhat of a personal interest in reclamation

Is that consistent with what Molycorp had

```
in the early 1970s?
 5
        Α.
               Yes.
 6
         Q.
               And one of the ideas that you explored was
 7
     reclaiming the tailings, a portion of the tailings
 8
     disposal area; is that right?
 9
               The old original underground tailings,
10
    yes.
11
               How about with respect to the offsite
         Q.
12
     tailings area, did you do a test plot to see if you
     could cover it and get vegetation to grow there,
13
14
     too?
15
               You know, I didn't personally supervise
16
    that but yes, the company did, in fact, have
17
     significant vegetation growing on the tailings
18
    ponds.
19
               And once operations were complete in the
20
     ponds, was that the company's plan to eventually
21
     cover it with clean material and revegetate?
22
               Yes.
23
               MR. AUGUSTINI: We looked at this exhibit
     earlier it is CX453, Mr. Hambrick.
24
25
               (By Mr. Augustini) Again for
0111
 1
    reorientation purposes this is the map of the Questa
 2
    Mine that indicates the patent boundaries that
 3
    correspond to the changes in the land ownership over
 4
    time, correct, Mr. Dewey?
 5
               Yes, sir.
        Α.
 6
               MR. AUGUSTINI: If we could just show the
 7
    next slide, please.
 8
               (By Mr. Augustini) As the previous one we
9
     saw with respect to the open pit, here we have
     shaded Molycorp's landownership as of January 1974
10
     after the land exchange, does that look accurate to
11
12
     you, sir, the shaded, orange shaded area, again, is
13
     the Molycorp owned land?
14
               I think it's accurate, yes, sir.
15
               We did ask a question about this earlier
         Q.
16
     in terms of whether the waste piles were going to be
     disbursed across the entire area. Does this photo
17
18
     show, for example, down to the southern boundary and
19
     out west that there is no indication of waste piles
    in those areas, correct?
20
21
               MR. HOPSON: Objection, ambiguous.
22
    don't know what areas we are referring to,
23
    Your Honor. I can't understand the question because
     it is ambiguous.
25
               THE COURT: Please restate your question.
0112
1
              (By Mr. Augustini) Over here,
     approximately, do you see any indication of waste
    piles in that area, sir?
```

```
No, I do not.
         Α.
 5
         Q.
               And after acquiring title to the
 6
     2,000-plus acres in the exchange in January of 1974,
 7
     Molycorp kept mining and kept dumping waste rock on
 8
     its land, correct?
 9
         Α.
               Correct.
10
         Q.
               Generally the same manner it had before,
11
     correct?
12
        Α.
               Correct.
               I would like to turn to the DMEA loan,
13
         Q.
14
     Mr. Dewey. We touched on that earlier. Molycorp
15
     applied for the DMEA loan ten years after your
16
     arrival in Questa, correct?
17
               No, ten years before my arrival.
         Α.
18
               Yes, you are correct.
         Q.
19
               The DMEA was in 1957 and you arrived at
20
     Molycorp in 1967, correct?
21
        Α.
               Correct.
22
         Ο.
               And was it your understanding Molycorp
23
     voluntarily filed the loan application and received
     approximately $200,000 in loan funds over a
24
25
     three-year period between 1957 and 1960?
0113
 1
               Yes, sir.
         Α.
 2
               So the loan was roughly $66,000 a year for
         Q.
 3
     three years?
 4
        Α.
               That is correct.
 5
               And Molycorp paid the full amount back to
         Q.
     the Government, correct?
 6
 7
         Α.
               Yes.
 8
               So ultimately Molycorp incurred
         Q.
9
     100 percent of the exploration expense, correct?
               That is not exactly correct, sir. The
10
     USGS geologists were intimately involved in the
11
     program. They brought a lot of expertise to the DME
12
13
     program that was not charged, if you will, it was
14
     just topnotch geologists advising the program.
15
               Sure. That was free, right?
         Q.
16
               Yes, sir.
         Α.
17
               So in terms of the money expended,
         Q.
18
     Molycorp paid 100 percent for the work, correct?
19
               Yes.
20
               And all of the exploration work between
21
     1957 and 1960, the DMEA period, was underground; is
22
     that right?
23
        Α.
               And there was no waste rock generated from
24
         Q.
25
     the underground exploration, correct? At least --
0114
               Well, there were some small amounts of
1
     drifting and crosscutting, and that rock associated
```

with that, of course had to come out of the tunnel,

```
but it was copious amounts relative to what we are
 5
     talking about today.
 6
         Q.
               Sure.
 7
               Just so I understand the last part, the
 8
     waste generated by underground exploration was
     insignificant compared to the actual mining,
 9
10
     correct?
11
         Α.
               Correct.
12
               Now, we discussed this morning that
     Molycorp old timers initially were hoping to find
13
14
     more of the super high grade or that they had been
15
     finding in the little veins in the mine, correct?
16
               That was the whole purpose of the
17
     exploration program, sir.
18
               And at your deposition you testified that
19
     perhaps the Molycorp team at the time before your
     arrival should have been listening more to
20
21
     state-of-the-art geologists like Stewart Wallace and
22
     John Schilling.
23
               Do you remember that?
24
         Α.
               Yes.
25
         Q.
               Are you familiar with John Schilling?
0115
 1
               I am familiar with his report.
         Α.
 2
               Did he work for the New Mexico Bureau of
         Q.
 3
    Mines?
 4
        Α.
               Yes, sir.
 5
               And was Questa Mine one of his most
         Ο.
     significant geological studies?
 6
 7
        Α.
               Yes.
 8
         Q.
               Are you familiar with his 1956 publication
9
     regarding the Questa Mine?
               That is correct.
10
               Do you understand Mr. Schilling spent
11
12
     about 14 months living and working at the mine site
13
     in the '50s?
14
        Α.
               Correct.
15
         Q.
               And he was welcomed by the Molycorp team,
16
     correct?
17
               Yes, sir.
         Α.
18
               So there is no doubt that Molycorp was
19
     aware of Mr. Schilling's geological study about the
     mine, correct?
20
21
         Α.
               Correct.
22
               And since it was published in 1956, that
23
     study would have been available to Molycorp prior to
     applying for the DMEA loan, correct?
25
               Correct.
         Α.
0116
               And is it your understanding that of
 1
```

Mr. Schilling's work that he did not think that

pursuing high grade ore as had been done in the past

```
was a good idea?
 5
        Α.
               Yes, I believe that is the conclusion he
 6
     came to, yes.
 7
               And he did suggest that while nobody knows
 8
     what the results would be, that exploration for low
 9
     grade ore might be a good path for the Questa Mine?
10
         Α.
               That is correct.
11
         Q.
               Now, Mr. Dewey, you also testified that
12
     Molycorp raised funds based on the award of the loan
     from DMEA; is that right?
13
14
         Α.
               Yes, sir.
15
               MR. AUGUSTINI: Mr. Hambrick, please show
16
     CX63.
17
               (By Mr. Augustini) Mr. Dewey, do you
18
     recognize this as the Molycorp stock offering that
19
     relates to the fundraising we just discussed?
20
         Α.
               Yes, sir.
21
         Q.
               If we could turn to Page 10, please.
22
               MR. AUGUSTINI: If you could blow up the
23
     bottom paragraph.
24
               (By Mr. Augustini) I will read it for the
25
     record, Mr. Dewey.
0117
 1
               "In 1954 the company, following geological
 2
     work on the property, undertook an exploration
 3
     program aimed at locating extensions of the ore
 4
     deposit. This work continued for two years and was
 5
     evaluated by the company and consulting geologists."
 6
               THE COURT: What is your question,
 7
     counsel?
 8
               MR. AUGUSTINI: Excuse me, Your Honor.
 9
               (By Mr. Augustini) If you would take a
     minute, Mr. Dewey does, that passage accurately
10
     reflect your understanding of the exploration work
11
12
     Molycorp was doing in the mid-'50s?
13
         Α.
               Yes.
14
         Q.
               And the last sentence there, "One of the
15
     possibilities that Molycorp was considering at that
     time was a large deposit of molybdenum, which would
16
     be of commercial grade if mined and milled in
17
18
     sufficiently large quantities."
19
               Is that consistent with your
20
     understanding?
21
               Yes, that is.
         Α.
22
               And as for DMEA certifying the presence of
23
     an ore body, your testimony is that is what happened
     after the loan concluded, correct?
25
               Correct.
         Α.
0118
1
               Regardless of what Molycorp found, under
     the loan agreement with the Government, there was no
     obligation to conduct any mining, correct?
```

```
Correct.
        Α.
 5
         Q.
               So the mining was a business decision by
 6
     the company, correct?
 7
         Α.
               Correct.
 8
               And Molycorp made that choice only after
9
     conducting much more exploration, ore body
     delineation, development work, correct?
10
11
         Α.
               Yes.
12
               And as we have discussed briefly this
         Q.
     morning, Molycorp would not embark on a
13
     50-million-dollar investment to begin large scale
14
15
     mining without preparing a mine feasibility study,
16
     correct?
17
         Α.
               Correct.
18
               You testified the feasibility study was
         Q.
19
     critical to justify investment and/or obtain
     financing for mine operations, right?
20
21
         Α.
               Yes.
               That is why Molycorp did so much work to
22
         Ο.
23
     explore and to develop the mine, to prove its
24
     feasibility, correct?
25
         Α.
               It was critical work to defining the
0119
 1
     limits of the ore research, yes.
 2
               I would like to just briefly show you your
 3
     written testimony. It is Page 28 or PDF Page 29
 4
     from the Court filing.
 5
               At the top is your discussion of the
     feasibility study. If you take a moment to look at
 6
 7
     that, sir.
 8
        Α.
               (Witness complied.)
9
               So if you are ready, the feasibility study
     reflected Molycorp's independent analysis of a
10
     number of factors, correct?
11
12
         Α.
               Correct.
13
               You list them here, but just to quickly go
14
     through them, those factors would include expected
15
     market place of molybdenum?
16
         Α.
               Yes.
17
               Capital required to construct a processing
         Q.
18
    mill?
19
               Yes.
        Α.
20
         Q.
               Infrastructure and equipment costs to do
21
    the mining?
22
        A.
               Yes.
23
               Labor and material costs for mining?
         Q.
24
        Α.
25
               Daily production rates at the mine?
         Q.
0120
1
        Α.
 2
         Ο.
               Floor to waste stripping ratios?
 3
        Α.
               Yes.
```

Waste hauling routes?

Q.

```
5
         Α.
               Yes.
 6
         Ο.
               Dump logistics and more, correct?
 7
               Say that again.
         Α.
 8
               I'm sorry, also the feasibility study, of
9
     course, would address waste dump logistics, correct?
10
     Where to place the waste rock that would be
11
     generated from mining?
               You know, at that particular time not in
12
     intimate detail, but we subsequently, that was taken
13
14
     into consideration, yes.
15
               So now that you have a feasible project
16
     you have to have adequate space to accommodate your
17
     waste rock, right?
18
               You could sit there and look at that space
19
     very easily, yes.
20
         Q.
               Yes.
21
               The United States did not participate in
     any of those different analyses, correct?
22
23
               Correct.
         Α.
               Mr. Dewey, I would like to turn briefly to
24
25
     the mill area again.
0121
 1
               MR. AUGUSTINI: Mr. Hambrick, if you could
 2
     put up Demonstrative 2.
 3
               (By Mr. Augustini) We looked at this
         Ο.
     earlier. And you did identify the mill area down
 4
 5
     where I circled; is that correct, sir?
 6
         Α.
               Yes, sir.
 7
         Q.
               Molycorp owned the land where the mill was
 8
     situated, correct?
9
               That is correct.
         Α.
10
               MR. AUGUSTINI: Now, I would like to show
     USX582.
11
12
         Q.
               (By Mr. Augustini) Mr. Dewey, do you see
     that this is a memorandum titled, "Mill Operation
13
     Report June 1976" addressed to you?
14
15
         Α.
               Yes.
16
               And I think it is prepared, we can see it
         Q.
17
     in a bit, but was Mr. Filick (phonetic) the manager
18
     of the mill?
19
         Α.
               He was the mill superintendent.
               Did you receive an operation report like
20
21
     this for the mill every month in your job?
22
        Α.
               Yes.
23
               MR. AUGUSTINI: Your Honor, move to admit
     USX582.
24
25
               MR. HOPSON: No objection.
0122
               THE COURT: Without objection USX582 is
1
 2
     admitted.
 3
               (Exhibit admitted, USX582.)
```

- Q (By Mr. Augustini) This is an example of the detailed information that Molycorp management received regarding all aspects of the mill production, correct?
 - A. Correct.
- Q. This is information that was routinely transmitted to you as your role as manager of the mine, correct?
 - A. Correct.
- Q. In addition to the land, did Molycorp own all of the buildings and machinery in the mill area?
- A. No. We were constantly struggling with finances and we generated some funds by selling all of our, not all of our equipment, but significant number of trucks to CIT. And so we leased the equipment back from, I don't remember now what the acronym stands for, but the lending company was called CIT. And other than that we owned everything.
- Q. Okay. Just to break that down a bit, Molycorp owned the buildings in the mill complex; is that right?
- 25 0123 1

6

7

8

9

10

11 12

13 14

15

16

17

18

19

20

21

22

23

5

6

7

8

9

10

11

12

13

14 15

16

17

18

19

20 21

22

23

24

- A. Yes.
- Q. And with regard to specific machinery, the ball grinders and whatnot, that is what was used to process the ore, correct?
 - A. Yes, sir.
 - Q. Was that Molycorp owned or --
 - A. Molycorp owned it, yes.
 - Q. And what was the other equipment that you mentioned that was leased from CIT then?
 - A. Well, basically just a portion of the whole truck fleet, of the haulage fleet.
 - Q. Okay. Then with respect to the mill, that was all company machinery and equipment, correct?
 - A. Correct.
 - Q. Molycorp also owned and operated the tailings pipeline that went from the mill down to the tailings area?
 - A. Yes.
 - Q. And if there was damage that resulted from the pipeline, one of the things Molycorp agreed was to indemnify the United States, correct?
 - A. That terminology is in the lease agreement, yes, sir.
- Q. With respect to the tailings area, sir -- MR. AUGUSTINI: If we can turn to CX370.
- Q. (By Mr. Augustini) Mr. Dewey, this is the site map that I believe you included in your direct testimony. Would you just take a moment and explain

```
for the Court where the tailings area is in
 5
     relationship to the mine?
 6
               Okay.
                      The mine obviously is labeled
 7
    Molycorp mine site, surrounded by a yellow
 8
     borderline. And if you look to the west of the mine
     cite, the next thing you see is the Questa, the town
 9
     of Questa itself, and just to the left of that are
10
11
     the two tailings facilities. They are shaded in
12
     brown, outlined in brown.
13
         Q.
               Yes, thank you, sir.
14
               The legend on the right side of the map
15
     indicates that the yellow line is property boundary.
16
               Do you see that?
17
               Yes, I do.
18
               So at least the yellow, yellow line
         Q.
19
     surrounds the dark area that is shaded to reflect
     the Questa Mine, correct, that is Molycorp property?
20
21
        Α.
               Correct.
22
         Ο.
               Over at the tailings area, if we trace the
23
     yellow line sort of roughly like that, this map
     indicates that that is the Molycorp property that
24
25
     encompasses the tailings facility, correct?
0125
 1
               That's correct.
         Α.
 2
               And over its lifespan the mill generated
     100 percent of the tailings slurry that was
 3
 4
     transported to the tailings area, correct?
 5
               Correct.
 6
               Molycorp directed, managed, monitored,
 7
    controlled, all of the tailings disposal operations,
 8
    correct?
 9
               Yes, sir.
         Α.
10
               THE COURT: You know, Counsel, I don't
    think there is any dispute about any of this.
11
               MR. AUGUSTINI: Yes, Your Honor, I just
12
13
    want to make sure it is in the record. I'll move
14
15
               THE COURT: It is in the record over and
16
    over and over again.
17
               MR. AUGUSTINI: I will move on,
18
    Your Honor. Thank you.
19
               Let's turn to USX368, please.
20
               (By Mr. Augustini) Mr. Dewey, are you
     familiar with the preventive maintenance and
21
22
     surveillance plan that Molycorp developed?
23
24
               MR. AUGUSTINI: I move to admit USX368,
25
     Your Honor?
0126
1
               MR. HOPSON: Your Honor, I am concerned
    about relevance on this one. We have a stipulation
    on the pipelines that we are not seeking any
```

```
contribution on the pipeline issue, so I don't know
 5
     what the relevance of this is.
 6
               THE COURT: That is why I said I thought
 7
     it was established. I thought it was also
     established that the United States didn't fund
     anything except the DMEA, they didn't pay for
 9
     anything, they just stored stuff on the unpatented
10
11
     lands.
12
               MR. AUGUSTINI: Correct, Your Honor.
               THE COURT: Why do we have to go through
13
14
     it over and over again?
15
               MR. AUGUSTINI: I don't plan to. I don't
16
    plan to ask questions about the pipeline either.
17
     This document addresses the chronology of the
18
     tailings area, which has not been established.
               THE COURT: It is irrelevant.
19
20
               MR. AUGUSTINI: The western tailings area,
21
     Your Honor, is part of their claim against the
22
     United States.
23
               THE COURT: All right. Is that correct?
24
               MR. HOPSON: Yes, the tailings area is
    part of the claim but this is a document about
25
0127
 1
    taking care of spills from the pipeline, which we
 2
     are not seeking contribution on.
 3
              MR. AUGUSTINI: The Court has already
 4
    ruled that it won't consider those and I don't have
     any questions about it, so it is moot.
 6
               THE COURT: Okay. Let's move along.
 7
               MR. AUGUSTINI: Let's turn to Page 19,
 8
    Mr. Hambrick.
9
               (By Mr. Augustini) What I wanted to get
     to, Mr. Dewey, was Section 35, the western tailings
10
     area. Is Section 35 where Molycorp chose to
11
12
     construct the western tailings impoundment, sir?
13
               I'm sorry, I was reading and I am not
14
     reading your lips. I'm sorry.
15
               Section 35, was that the area in which
16
    Molycorp constructed the western tailings
17
     impoundment?
18
         Α.
              Yes, sir.
19
               Do you see the date in the second
     sentence, 1971, was that the date that Molycorp
20
21
    began to build the first end in the western tailings
22
     area?
23
        Α.
               Yes, sir.
               So Molycorp did not begin disposing
         Q.
25
     tailings in the western area until after that dam
0128
    was completed in 1971, correct?
1
        Α.
              That is correct.
 3
         Q.
              And according to USX368 the dam, Dam 4,
```

was that the one, main one in Section 35?

```
5
         Α.
               Repeat it, please.
 6
         Q.
               Sorry.
 7
               Was Dam 4 the main tailings dam in
 8
     Section 35, the western area?
9
               Yes, sir.
10
               Was that about 118 feet tall,
11
     approximately a thousand feet long and 1,300 feet
12
     wide?
               Yeah, to the best of my recollection, that
13
        Α.
14
     is correct.
15
               THE COURT: It is just what it says there.
16
               MR. AUGUSTINI: Yes, Your Honor.
17
               THE COURT: Counsel, you are going to have
18
     to move this. You have taken all morning and all
     afternoon going over stuff that was either not
19
     controverted or that we know is not disputed.
20
21
               MR. AUGUSTINI: Okay, I will move on,
22
     Your Honor.
23
              (By Mr. Augustini) Are you aware that
24
     perimeter ditches surrounded the tailings area?
25
         Α.
               Yes, sir.
0129
 1
               What was the purpose of those, sir?
         Q.
 2
               To control meteoric waters, keep them from
 3
     encroaching the tailings areas.
 4
         Q.
              And was that natural runoff that would
 5
     come down from the mountain?
 6
        Α.
               Yes.
 7
         Q.
               Was the purpose of those to dispose of
 8
     tailings waste?
9
        Α.
               Molycorp never intended for contaminated
10
         Q.
11
     water to go from the tailings ponds to the Red
     River, correct?
12
13
               All the water went, eventually all the
14
     overflow eventually went to the Red River from the
15
     very beginning.
16
               It did flow to the Red River, sir, but it
17
     was not Molycorp's intention that there would be any
18
     contamination in the outflow from the impoundments
19
     down to the river; is that correct?
20
         Α.
               That's correct.
21
               And can you just briefly describe for the
         Ο.
22
     Court, please, the canting process within the
23
     impoundments?
                     The tailings are thickened at the
24
         Α.
               Yes.
25
     mill to consistency of about 60 percent solids,
0130
1
     40 percent water, pump, in this case, that Dam
 2
     Number 35, 10 miles to the pond.
 3
               A course fraction, the heavy, all of the
```

```
sediments in the solution settles out into the pond
     and over time the clear water is on the surface and
     that is decanted off in a series of spillways
     directed to an iron exchange plant where the water
 7
     is treated to remove copious amounts of rubidium
     that back in, I think, 1985 the EPA decided was too
 9
     much and then it is discharged into the Red River
10
11
     immediately above the fish hatchery.
12
               Right. And so the basic concept of the
13
     decanting would be for the tailing solids to sit
14
     right there and collect at the bottom of the
15
     impoundment, correct?
16
         Α.
               Correct.
17
               And then the clear or the clean water
18
     would move on down, after treatment would move on
19
     down towards the Red River, right?
20
        Α.
               Correct.
21
               MR. AUGUSTINI: Mr. Hambrick, please
     display USX478.
22
23
               (By Mr. Augustini) Mr. Dewey, do you
24
     recognize your initials there on this memorandum?
25
         Α.
               Well, yes, I do.
0131
         Q.
1
               The date is May 10, 1991?
 2
         Α.
               Correct.
 3
         Ο.
               The title is, "Process Residues and
     Waste, " correct?
 4
 5
        Α.
               Correct.
 6
         Q.
               Could you please describe what the purpose
 7
     of this memo was?
 8
               At this point in time we had decided to
9
     put Molycorp up for sale and we had created a data
     room and we wanted to put everything in the data
10
11
     room that pertained to Molycorp's operation.
12
               And this memo was prepared to go to
13
    Mr. Dikers who was in charge of the data room at the
14
     time.
15
               So was this in the nature of due diligence
         Q.
16
     process for potential acquisition then?
17
               Yeah, for something of who might want to
18
     look at acquiring Molycorp could look at, yes.
19
               MR. AUGUSTINI: Let's turn to USX477,
20
     please.
21
               (By Mr. Augustini) Do you recognize this
         Q.
22
     memo, sir?
23
        Α.
               Yes, I do.
               And this is Mr. Shoemaker's response to
24
         Q.
25
     the exhibit that we previously reviewed, correct?
0132
```

A. Yes.

1

Q. And he goes through and identifies sources of waste that are located at the Questa Mine,

```
correct?
 5
               Yes, sir.
         Α.
 6
         Ο.
               Have you had a chance to review this
 7
     memorandum prior to testifying to today?
 8
               I have.
         Α.
 9
         Q.
               Is there anything in the memo
10
     Mr. Shoemaker wrote that is incorrect?
11
         Α.
               No.
               MR. AUGUSTINI: No further questions,
12
     Your Honor.
13
               THE COURT: Thank you. You may redirect. MR. HOPSON: Your Honor, good afternoon.
14
15
16
                     REDIRECT-EXAMINATION
17
         BY MR. HOPSON:
               Good afternoon, Mr. Dewey. Let's start by
18
     looking again at Chevron Exhibit 245, parts of which
19
     were reviewed during your cross-examination.
20
21
     on the screen in front of you, and this is the
22
     Miller memo. Now you knew Mr. Miller, right?
23
               I'm sorry?
         Α.
24
         Ο.
               Did you know Mr. Miller?
25
         Α.
               Oh, very well, yes, sir.
0133
 1
               Okay. Did Mr. Miller prefer the land
 2
     exchange or did he prefer the valley fill plan?
 3
               He preferred the valley fill plan.
         Α.
 4
         Q.
               Why did he prefer the valley fill plan?
 5
               I believe this memo, can I look at the
     whole memo for a minute? I think this memo
 6
 7
     described why.
 8
               The second paragraph he outlines his
 9
               "Future generations will no doubt be faced
     with tremendous problem regarding the Red River
10
     canyon dumps. First the material is already
11
12
     standing at the angle of repose because that was the
13
     angle of the hillside.
14
               "Second the material is easily altered by
15
     weathering and it should not take many summers for
16
     the channel to form under dump slopes and create
     possibility of catastrophic mud slides.
17
18
               "The idea of putting a highway in the
19
     river through a tunnel has already been rejected.
     Now is not the time. Emotions are running high
20
21
     against strip mines from the standpoint of ecology,
22
     a tunnel would be a more practical solution.
23
               "First of all, by dumping straight across
     the canyon would have only the dump faces to contend
24
25
     with. Secondly, we could terrace or flatten the
0134
     dump faces and stand a much better chance of
 1
 2
     controlling erosion. A flatter slope would be more
     amenable to trees and ground cover."
```

John and the rest of us never gave up on the idea that this was where it needed to go.

- So if you went back to December 10, 1970 and you personally could choose between valley fill plan and the land exchange, what would you choose?
 - Valley fill plan.

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- Why did you accept the land exchange that was proposed by the Forest Service?
- During the meeting when they discussed the use of mill site claims, one of the Government officials stated that we are not sure that waste disposal on mill site claims is an allowable use. And if you choose to do that, we would probably -we would force a friendly, I think they used the word friendly, validity contest.

And, you know, Judge Watson, I'm sorry, Jack Watson knew enough about where things are going that a validity contest in all probability would be several years and we needed to have a place to go the next day.

When you talk about the claims in the valley, are those, those fan-shaped claims you were 0135

talking about earlier today?

- Α. Yes, sir.
- Did you view the Forest Service discussion Ο. of a validity contest as a threat?
 - Very definitely.
- Q. And finally on this subject, this morning when you were answering questions you said the land exchange is why we are here.

What did you mean by that?

Well, if we would have had the ability to go across the highway, probably only -- I can't be specific, but I would say 25 percent of the waste that is on that hillside now would be what was there, maybe not in the hole with -- but it would be just enough, just enough to get across the tunnel and a culvert put the highway on a culvert, the tunnel, and get to the other side.

We had to spend our full time figuring out how to stack close to 400 million tons on that piece of land exchange and that is the reason for these extensive dump plans going on continually. And if we were able to just go straight across, particularly, you know, I get an opportunity sometime around 1970s to go and visit this other mine in Arizona, Twin Buttes, where they had a

- 0136 1 similar rock failure. And in the process, I was
 - shown a system they put in, in pit crusher with a
 - conveyer system limiting the truck haulage extremely

at a third the cost of truck haulage.

There is no question in my mind that if we were hauling trucks across valley full, after what I saw overnight we would have had a conveyer going across that valley fill.

- Q. That raises something. Was the valley fill a longer haul than the land exchange lands?
- A. No. Well, yes and no. In some configurations of those dumps they had to almost do S-shaped turns in order to try to stage the volume of material that was going in level by level in order to try to make it all fit.
 - Q. Okay.

MR. HOPSON: Ms. Hutchman, can we see just the front page of Chevron 281, which is the Environmental Impact Statement.

- Q. (By Mr. Hopson) Mr. Dewey, when you were testifying about the environmental impact statement you said it was always Molycorp's intent to continue mining; is that correct?
 - A. Correct.
- Q. But if you didn't get land through the 0137

land exchange or through the valley fill, would you have been able to continue mining?

- A. Definitely not.
- Q. You talked about in the environmental impact statement terracing and restoring the vegetation. Is it possible to do that on those front rock dumps that go along the highway and the Red River?
- A. Yes, we had test plots. I am sure Chevron continues to have test plots long after I left but we were able to grow vegetation, yes, sir.
- Q. Okay. We looked earlier today, you were asked questions about U.S. Exhibit 191, which was an article about by Jack Dolman about long hold drilling.

Do you remember that?

- A. Yes, I do.
- Q. Whose idea was it to do long hole or diamond drilling during the DMEA exploration program?
- A. The USGS or the Government geologists literally insisted if we were going to get an agreement, at least as I read all of the back and forth, if we were going to get this application approved, we had to, Molycorp, I said we, Molycorp
- 1 had to accept this proposal to do some diamond
- 2 drilling to look for what Schilling described as a
- B potential low grade resource.

```
There is no question that Carman Greslin and all of those people who were involved in that 50-ton-a-day mule horse and buggy operation were interested in that, but in order to get that contract, they agreed to it.
```

- Q. And just before the negotiations with the DMEA in 1954 to 1956, was Molycorp looking for high grade ore or low grade ore?
 - A. Only high grade.

- Q. Was Molycorp reluctant to look for low grade ore?
 - A. They had no use for it.
- Q. Let me ask you this. How important was the expertise of the U.S. Bureau of Mines and the geological survey in the course of the DMEA program?
- A. You know, very important. If you read through Carman's reports, he consistently compliments the expertise of the geologists that the Government had.

And, you know, people prior to the DMEA program, the only expertise they had were hiring people like Schilling or when they would visit the

property. So they were there, you know, to direct the program as it was underway, they reviewed what was going on and made some suggestions and Carman refers to that as being very helpful.

- Q. Okay. You mentioned Mr. Schilling.
 MR. HOPSON: If we could, Ms. Hutchman,
 can we call up Chevron 43 and turn to Page 92.
- Q. (By Mr. Hopson) Now, do you remember being asked about Schilling's comments and observations about low grade ore?
 - A. Yes, I do.
- Q. Let's look at what Mr. Schilling's conclusions were about low grade ore.

"In summary," he says, "large tonnages of low grade molybdenum ore occur but no deposits are not large enough to be mined by block caving or open pit methods which would be necessary for profitable operation."

Was that the understanding of Molycorp and everybody else prior to the DMEA program?

- A. Yes, sir. Not everybody else because if you look back at some of the correspondence that was taking place between the Government individuals, they felt that the exploration for high grade was not a valid reason to justify a DMEA contract. They
- 1 needed to have a better target.
- 2 And this to them, based upon this
- 3 Schilling report, was the better target and why they

- were insisting on the diamond drilling program to look for this low grade ore resource.
- Q. And when you say, Mr. Dewey, they were insisting, are you referring to the DMEA and the geological survey and the Bureau of Mines and the other agencies of the United States?
- A. Yes. If you look back through the files you will see comments that, you know, we don't believe that Molycorp management was interested or will agree to this. Ultimately they had to do something, and they agreed to it.
- Q. I want to change gears here for a minute. Mr. Augustini asked you about, a number of questions about Kennecott. And I believe you testified that there was an agreement to enter a partnership with Kennecott; is that correct?
 - A. Correct.
- Q. Was that agreement finalized or consummated?
 - A. No, it was not.
- Q. Did you negotiate to buy Kennecott out of that agreement?

- A. Yes, I did.
- Q. Why?
- A. I was against the agreement from the very beginning. I felt that we had worked all of these years on this property, we had finally discovered a resource that looked like it had a chance to be profitable, and for a lousy \$5 million, it turned out to be 6 million, we were going to give Kennecott a chance to take 60 percent.

We had accumulated thousands of acres of water rights which were precious, timely, patented ground, 20,000 acres of patented ground by that time, and to give it all away for what initially was \$5 million to me never made sense.

- Q. Well, let me just stop you there, Mr. Dewey. While you were exploring that partnership, I think it was pointed out that Kennecott spent about 6 million?
 - A. Correct.
 - Q. What did they spend that on?
- A. Definitive drilling of -- we had prior to getting Kennecott involved, we had found enough drilling to make an estimate of this resource, but we had no money, and so we -- I was told to find a joint venture.

- Q. Did Kennecott spend that money to benefit Molycorp or to protect its investment?
 - A. Well, I don't believe Kennecott had any

```
investment in Molycorp at that time. I think
 5
     sometime, sometime after that -- after their study
 6
     in 1961, I think they sold their investment.
 7
     don't remember seeing any discussion about Kennecott
 8
     continuing in the ownership in any kind of Molycorp.
 9
               Why did they spend the $6 million figuring
10
     out what was there?
11
         Α.
               Well, you know, we had the low cadmium,
12
     60 million tons sitting behind the town of Questa.
13
               Moly prices for the first time ever in my
14
     career had gone from $3 a pound to $25 a pound and
15
     ultimately ended up at $40 a pound. And typical of
16
     what happens in this commodity business, everybody
17
     and their brother jumps on the opportunity to, you
18
     know, 127 oil a day, I mean, we all can see what
19
     happens to the profits to the oil company.
20
               So Kennecott was very interested in
21
     participating in this resource that they knew a lot
22
     about because they had been in and out of it in 1961
23
     and prior. It was a very easy decision for them to
24
     make.
25
               It was easy for our management to make it
0143
     at the time because they had lost so much on the
 1
 2
     open pit portion that they were insistent that if we
 3
     were going to do anything in the future we needed to
 4
     have a partner.
 5
               Was Kennecott ever an owner of the Questa
        Q.
 6
     site?
 7
               No, sir.
         Α.
 8
               We talked a little bit on your direct, you
         Q.
9
     were asked about the valley fill plan and
10
     Mr. Torgerson's role in helping to develop that.
11
               Do you recall that testimony?
12
         Α.
               Yes, I do.
13
               Who was Mr. Torgerson?
         Q.
               He was, at the time a senior engineer in
14
15
     the engineering department and he eventually became
16
     chief engineer.
17
               Did he develop written proposals and
         Q.
18
     drawings about valley fill plan?
19
               Yes, yes, sir.
20
               Do you recall seeing them?
         Q.
21
               I recall seeing the drawings of the
22
     culverts and the tunnel concept. I didn't see
23
     anything other than -- that I can remember today,
24
     other than those.
25
               Okay. And as we have already established,
0144
 1
    Molycorp continued to be interested in the valley
```

fill program even as it was pursuing the land

3

exchange, right?

A. Yes.

Q. You were asked a number of things today over and over again, things that Molycorp did like buying equipment and hiring employees. I just want to ask you a couple of things the U.S. did.

Did the U.S. take discretionary actions to provide special use permits at the Questa site?

A. You know, very definitely in the beginning the tailings lines had to traverse 6 or 7 miles of Forest Service land to make it to the tailings pond area.

Section 35 land was owned by the BLM, at the time, and practically overnight they facilitated a public auction to enable us to acquire that parcel.

There were special use permits for decanting water from the tailings dam to the river. Anything we did required some kind of a, you know, approval or permit.

And they were anxious to provide us with those.

Q. At the time did you ever refer to the 0145

United States Government as your landlord?

- A. Yes, sir.
- Q. And why did you refer to them as your landlord?
- A. Because is precisely what they were. We were operating on U.S. Forest Service land and, you know, one of our -- one of our concerns mentioned the time it took between the time the land exchange was agreed to in 1969 and it finally approved in

At any point in time somebody could have decided they didn't like what we were doing, and that would be the end of it. So we really wanted that consummated and so that is why, we were, they were in control of anything we did.

- Q. Did you work to maintain a good working relationship with the Forest Service and other agencies in the United States Government?
- A. Yes, I did. I had a very close relationship with John Hart, the Forester. Whenever one of our employee's wife died prematurely and she happened to be a ski instructor in a little small ski area across from an old Forest Service graveyard that hadn't been used in 75 years or so and her husband wanted her buried there. And I went and
- 1 talked to John and told him what the situation was

and he gave me permission to take a grave and bury

3 her there.

About two years later her husband left us and went off to Idaho and worked for SIMCO Company and drowned in a cold lake and his family whose brothers worked at the mine said we got to plant Al next to Judy and I had to go back to John.

And as far as the fish hatchery was concerned, I had a relationship with everybody from Led Gordon who was the head of the whole department of Fisheries to Roy Pope, Pope named a lake after Roy when we first started Dam Number 35 and they opened up the gates to let some recant water out, it created some turbidity in the river because that wash hadn't been used since a rainstorm several months prior. And Roy came up, gave me a lot of static and within about two hours we had a dam created, temporary dam to control it. We had to stop it immediately, and I guess tongue in cheek, but I painted a sign that said Pope Lake and stuck it in the ground and got Roy to come back up and show him what we had done.

Let me focus you back on the Questa site for a minute. Did the United States take other 0147

discretionary acts such as providing rights of way?

- Α. Yes.
- Did the United States provide lands, Ο. including lands for disposal of waste rock through land sales and land exchanges?
 - Α. Yes, sir.
- Did the United States Government support Q. and promote the open pit mining at Questa?
- Very definitely. You know, there are letters in the files from Department of Interior talking about how poor Northern New Mexico was and the Forestry at that time back in those years were mobile use agencies.

And the head Forester was advising the local Forester that we needed to do everything that we can to help Molycorp, help this mine to help the people of Northern New Mexico.

- Back to your personal relationship with the Questa Mine site. When you arrived at the site in 1969 --
 - Α. '67.
- -- sorry, 1967. When you arrived at the site in '67 did the United States own part of the land at the Questa Mine site?
 - Α. Yes.

25 0148

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22

23

1 Did the United States own land on which Q. waste rock was deposited at the time you arrived at the Questa Mine site?

```
Yes.
        Α.
 5
         Q.
               Was the United States aware that its land
 6
     was being used for waste rock disposal?
 7
               Yes, it was.
         Α.
               To your knowledge, all your decades with
8
     the company, did the United States ever object to
9
10
     the manner in which Molycorp disposed of waste rock?
11
               They expressed concerns about the
     possibility of a dump encroaching the highway and in
12
     several instances we had already established some
13
     catchment basins, if you will, or berms that we
14
15
     should continue that in a new area we were dumping
16
     in.
17
               That was the very same land that the
18
     United States gave you in the land exchange, right?
               They were in the process of giving it to
19
     us. They still owned and controlled it then.
20
21
               There were questions asked about stock
     offerings that Molycorp did, including one in 1957.
22
23
               Do you recall that?
               Yes, I do.
24
         Α.
25
         Q.
               And in the wake of the DMEA program and
0149
1
     the discovery of the low grade ore body, did
 2
     Molycorp go out and raise money?
 3
               Yes, they did.
         Α.
               Did they do it through securities
 4
         Q.
 5
     offerings?
 6
         Α.
               Yes.
 7
               Did they do it through bank loans?
         Q.
               I think there was a small bank loan then
 8
         Α.
9
     was primarily the security offering or something
10
     approaching $13 million or so.
               In that securities offering, did they
11
12
     attach any documents referencing the DMEA?
13
               Yes, they attached the contract itself and
         Α.
14
     I referred to the originals.
15
               So the DMEA contract was attached to the
16
     prospectus of raising money, right?
17
         Α.
               Yes.
18
               And did they use the DMEA certification of
19
     the discovery in connection with obtaining bank
     financing and other financing?
20
21
               Yes, very definitely.
         Α.
22
         Q.
               I want to look at one last document,
23
     Mr. Dewey.
               MR. HOPSON: Ms. Hutchman, can we call up
24
25
     Chevron 46 at Page 6, please.
0150
1
               (By Mr. Hopson) You know, Mr. Dewey, that
     this is the application, the original application
```

that Molycorp made to obtain DMEA funding and

```
assistance, correct?
 5
         Α.
               Yes, sir.
 6
         Ο.
               Will you read for us what they said about
 7
     their current plans at the time they were asking the
 8
     DMEA for help?
9
        Α.
               "As stated, no production is forthcoming
10
     from any part of the mine and no ore reserve are
     considered available. Also, no other exploration
11
12
     work is, for the present, planned other than that
13
     covered by this application."
               You have spent many years of your life in
14
15
     the mining industry and became a senior executive at
16
     Molycorp. Do you believe a company that has no
17
     production and no reserves would have obtained
18
     financing but for the DMEA loan?
19
               No, I do not.
         Α.
20
               MR. HOPSON: No further questions,
21
     Your Honor.
22
               THE COURT: Thank you. I have one
23
     question.
24
               Mr. Dewey, did your company store waste,
25
     put waste products on unpatented mining claims?
0151
 1
               THE WITNESS: Yes, sir.
 2
               THE COURT: And how many were there, if
 3
    you can approximate.
 4
               THE WITNESS: Well, during this whole
 5
    period of the land exchange nearly all of that land
     was unpatented mining claims, which we withdrew the
 6
 7
     claims in order to facilitate the land exchange.
 8
     That was a requirement.
 9
               You know, prior to that there was
10
     definitely places where waste disposal was going on
11
     unpatented ground.
12
               THE COURT: And how about on unimproved
13
     mill sites?
14
               THE WITNESS: Unimproved mill sites. Yes,
15
     some of the original unpatented mill sites, yes. On
     Capulin Canyon we used mill sites. Capulin Canyon
16
17
     is large canyon that faces Questa. It goes directly
18
     south, so the top of the mountain when we had to get
19
     up, the top of the mountain was stripped off and put
     into Kathleen Canyon. And that is the first place
20
21
    that we used this mill site claims that were not
22
    patented.
23
               THE COURT: All right.
                                       Thank you.
24
     may step down.
25
               (Whereupon the witness was excused.)
0152
1
               THE COURT: Please call your next witness.
               MR. TODD: Your Honor, Chevron calls
 3
    Dr. Neal Rigby.
```

```
THE COURT: I'm sorry, say who?
 5
               MR. HOPSON: Neal Rigby, Dr. Rigby.
               (Whereupon the witness was sworn.)
 6
 7
               THE DEPUTY CLERK: Please be seated and
 8
     state and spell your name for the record.
9
               THE WITNESS: My name is Neal Rigby,
10
    N-E-A-L, R-I-G-B-Y.
11
               MR. TODD: Dr. Rigby, have you prepared
12
     written testimony in this matter?
13
               THE WITNESS: Yes, I have.
14
               MR. TODD: Before it is offered, is there
15
     any testimony that you would like to update?
16
               THE WITNESS: Two items on my direct
17
    testimony.
                One is on Page 7 where my original rate
18
    was $560 an hour. That was increased on January 1st
19
     to $645 an hour.
20
               And there is another change, which is on
21
     Page 37, which is a typo, where I refer or what is
22
     written is northwest zone and actually, in fact, it
23
     should be northeast zone.
               Other than that, nothing.
24
25
               MR. TODD: Your Honor, with those two
0153
     changes, we submit Dr. Rigby's testimony.
 1
 2
               THE COURT: Very good.
 3
               (Dr. Neal Rigby's direct testimony was
 4
    prefiled and admitted.)
 5
               THE COURT: You may cross-examine.
 6
               MS. KIMBALL: Thank you, Your Honor.
 7
                       CROSS-EXAMINATION
        BY MS. KIMBALL:
 8
9
               Good afternoon, Dr. Rigby.
         Q.
10
        Α.
               Good afternoon.
11
         Q.
              You are employed by SRK Consulting,
12
    correct?
13
        Α.
               Correct.
14
               SRK provides full service consulting to
         Q.
15
    companies operating mines, correct?
16
         Α.
               Correct.
17
               SRK helps companies develop and maintain
         Q.
18
    mines, is that right?
19
               Among other things, yes.
               They help companies plan and conduct
20
21
     exploration for mines?
22
        Α.
               Yes.
23
               They help mining companies develop mines?
         Q.
24
         Α.
25
               And they help mining companies find
         Q.
0154
     financing for their mines?
1
         Α.
               Indeed, yes.
 3
         Q.
               Is it fair to say that mining companies
```

```
make up a large share of the clientele of SRK
 5
     Consulting?
 6
         Α.
               A large share, yes.
 7
               Aside from a couple of years when you were
         Ο.
 8
     employed directly by a mine, you have worked for SRK
     for virtually your entire career; is that correct?
 9
10
         Α.
               44 years.
11
               And you were the group chairman of SRK
         Q.
12
     Global from 1995 through 2010; is that right?
13
               Yes.
14
               And that position oversaw SRK's work in
         Ο.
15
     North America; is that accurate?
         A.
16
               Globally.
17
               Okay. Did that include --
         Ο.
18
               It includes North America, yes.
         Α.
19
               Thank you.
         Q.
20
               And Chevron and its predecessor Molycorp
21
    hired SRK Consulting to consult on the Questa Mine
22
     while you were the chair over North America,
23
     correct?
24
         Α.
               Over a period of time, yes.
25
         Q.
               Okay. And what period of time was that?
0155
 1
               I am not entirely certain, but I would say
 2
     probably SRK's involvement in the maybe '80s and
 3
     '90s, maybe beyond that.
 4
         Q.
               Up into the 2000s?
 5
         Α.
               Yes.
 6
               Okay. And is SRK Consulting current doing
 7
     any work for Chevron Mining aside from your expert
 8
     services?
 9
               Not that I am aware of.
         Α.
               Okay. You mentioned in your testimony and
10
         Q.
11
     I am going to turn to your opinions, I apologize.
12
               Now you mentioned in your testimony that
13
     there are certain places where acid rock drainage
14
     occurs naturally near the Questa Mine, correct?
15
               Yes.
         Α.
16
               This case is solely about responsibility
         Ο.
17
     for the mine waste that Chevron created at its mine,
18
     correct?
19
               Correct, but the receiving environment in
         Α.
20
     totality is very important.
21
               But they are not being asked to clean up
22
     natural formations, are they? They are being asked
23
     to clean up the waste rock that they created?
         Α.
               I believe so, yes.
25
         Q.
               And Chevron extracted more than
0156
1
     300 million tons of waste rock from the open pit,
     correct?
```

Α.

Yes.

- And that open pit mine was on land that 5 Chevron has owned since the 1920s, isn't that right? 6 Α. The mine itself, yes. 7 The open pit mine? Q. 8 Yes. Α. 9 And Chevron owned that land for decades Q. 10 before they even contemplated building the open pit, 11 right? 12 Α. 13 Q. As of 1974 Chevron owned virtually the entire area of the mine, isn't that right? 14 15 I believe so. 16 And Chevron dumped over 300 million tons Q. 17 of acid waste rock around the pit, around the open pit on land that it has owned for decades, right? 18 No, I disagree with that. 19 Α. 20 They have not owned that land for decades? Q. 21 No, no, no, I disagree that it is 22 300 million tons of acid waste rock. Some is acid 23 generating and some isn't. 24 Okay. Would it be fair to say they have dumped 300 million tons of waste rock that contains 25 0157
 - acid waste rock around the open pit on land that they have owned since the '70s?
 - A. That contains a degree of acid waste rock, yes.
 - Q. And the 300 million tons of waste rock on Chevron's land generates acid mine drainage that is separate from and different drainage than the natural acid rock drainage, right?
- 9 A. Can you differentiate, please, natural 10 versus?
 - Q. There is drainage that is occurring from the waste rock that Chevron created?
 - A. Yes.

4

5

6 7

8

11 12

13

14

15

16 17

21

- Q. That is different than that is -- it is not the exact same waste rock that is coming from the natural formation, right? There is waste rock coming off of Chevron's waste rock piles?
- 18 A. In addition to the drainage, the acid rock 19 drainage coming from the hydrothermal alteration 20 scars, yes.
 - Q. Thank you.
- 22 Chevron alone extracted the rock from the 23 open pit mine, correct?
- 24 A. Correct.
- Q. The United States did not extract any rock 0158
- 1 from the open pit mine?
 - A. No.
 - Q. And Chevron alone arranged for the

```
transportation of the waste rock from the open pit
 5
     to the dump sites?
 6
         Α.
               Yes.
 7
               The United States did not make any
         Ο.
 8
     decisions regarding how the waste rock was
     transported to the dump sites?
9
10
         Α.
11
         Q.
               And Chevron alone actually transported
12
    that waste rock, isn't that right?
13
               Yes.
14
               And Chevron owned the vast majority of the
         Q.
15
    dump sites by 1974, isn't that right?
               Was that up to or including the date of
16
17
    the land exchange, which was in 1974.
18
              As of the land exchange they owned
19
    virtually all of the land that the waste rock is on?
20
         Α.
               Yes.
21
         Q.
               Okay. And because Chevron owned and
22
    operated the mine, the EPA has now required Chevron
23
     to take certain steps to prevent its mine waste from
24
     contaminating the Red River, isn't that right?
25
         Α.
               I believe so.
0159
 1
               There is no question that Chevron's mining
 2
     contaminated this site and impacted the Red River,
 3
    right?
 4
         Α.
               To a degree, yes.
 5
               There is no question that the
         Q.
    United States did not conduct any mining whatsoever
 6
 7
    on the mine site, correct?
 8
         Α.
               Correct.
9
               You visited the site in 2018 and took
         Q.
    photos of the open pit, right?
10
               I visited the site, twice.
11
         Α.
               Okay.
12
         Q.
13
         A.
               2018 and 2019.
14
               Okay. Did you take photographs while you
         Q.
15
    were there?
16
        Α.
17
               MS. KIMBALL: Mr. Hambrick, could you pull
18
    up USX596.
19
               (By Ms. Kimball) Dr. Rigby, is this a
    photograph that you took of acid rock drainage in
20
    the open pit of the Questa Mine?
21
22
        Α.
               I believe so, yes.
23
               MS. KIMBALL: Your Honor, I would like to
    move for admission of USX596 into evidence.
25
               MR. TODD: No objection.
0160
               (Exhibit admitted, USX596.)
1
              (By Ms. Kimball) Dr. Rigby, approximately
    how big is this pool of acid mine drainage?
```

```
What do you mean how big?
         Α.
 5
         Q.
               Do you have any concept of the --
 6
         Α.
               Gallons or, no, I have no idea.
 7
         Ο.
               How about the footage?
 8
               No, not really.
         Α.
9
         Q.
               Can you say like in a ballpark is it more
10
     than 100 feet across, is it more than 5 feet across?
11
               No, I think you are probably looking at
12
     maybe 100 feet by 200 feet or thereabouts.
13
         Q.
               Thank you.
14
               THE COURT: I'm sorry, what was your
15
     answer to that question.
16
               THE WITNESS: 100 feet by 200 feet.
               THE COURT: I'm sorry, say it again.
17
18
               THE WITNESS: 100 feet by 200 feet.
19
               THE COURT: Okay. Thank you.
20
              (By Ms. Kimball) And a similar pool sits in
21
     the subsidence area of the mine, correct, right on
22
     top of the second underground mine?
23
               Could you repeat that, I'm sorry, I missed
         Α.
24
     it.
25
         Q.
               A similar pool of acid rock drainage sits
0161
     in the subsidence area of the mine right on top of
 1
 2
     the second underground mine?
               Yes. But a lot of that would drain
 3
         Α.
 4
     through due to the subsidence.
 5
               MS. KIMBALL: Mr. Hambrick, could you
     please pull up -- did I move for admission of
 6
 7
     USX596?
 8
               MR. TODD: Yes.
9
               MS. KIMBALL: Thank you. Mr. Hambrick,
     could you please pull up USDEM0004. Could you zoom
10
11
     in on the subsidence area.
12
         Ο.
              (By Ms. Kimball)
                                It is a little hard to
13
     see because of the wording is right over it, but can
14
    you see the little yellow shading behind the
15
    subsidence?
16
               Yes, I can.
         Α.
17
               That is the acid rock drainage that is in
         Q.
18
     the subsidence area?
19
               Just above the subsidence area, yes.
20
               And do you have any idea of the general
21
     size of those pools?
22
        Α.
               Probably not dissimilar to the one in the
23
     pit, maybe slightly smaller.
               Okay. And that acid rock drainage is
24
         Q.
25
     filtering down through the underground mine works of
0162
1
     Chevron's second underground mine, correct?
              Yes, where it is collected today, where it
     is collected and pumped brought back for treatment
```

```
before discharge to the Red River.
 5
               You said today. Did there come a time
         Q.
 6
     when that changed?
 7
               I believe so, but I don't know the date.
         Α.
               Because of Chevron's mining impacts, the
 8
     EPA has required Chevron to manage and collect all
9
10
     the mine runoff and conduct water treatment for a
11
     new treatment plan at the Questa Mine, right?
12
               Yes, and I visited that plant.
         Α.
13
         Q.
               Okay. And Chevron is not required to
14
     clean up acid rock anywhere in the Red River Valley
15
     except in the mine site that it exclusively owned
16
     and operated for the past 50 to 80 years, correct?
17
               Can you repeat that, please.
         Α.
18
               Chevron's only required to clean up acid
         Q.
19
     rock from its own mine?
               Acid rock drainage or acid rock.
20
        Α.
21
         Q.
               Well, both, actually?
               Within its own property, I believe so.
22
        Α.
23
               It is not cleaning up any other parts of
         Q.
     the Red River Valley?
24
25
         Α.
               Upstream and downstream of the mine.
0163
1
         Q.
               Well, that it didn't cause, I mean?
 2
               That it didn't cause.
         Α.
 3
         Ο.
               Correct.
        A.
 4
               I believe so.
 5
         Q.
               So you believe that they are cleaning up
 6
    waste?
 7
         Α.
               No, no.
 8
         Q.
               Thank you.
9
               And with respect to the rock pile, Chevron
     is also expected to properly manage the piles that
10
     it designed, created and left exposed to the
11
12
     elements for the past 50 years; is that right?
13
         Α.
               I believe so.
14
               It is not expected to address any
         Q.
15
     nationally occurring rock formation?
               Well, in actual fact, the active waste
16
17
     rock disposal on the front piles, the ones close to
     the R38, they actually covered and effectively
18
19
     sealed, I think, two or three hydrothermal
     alteration scars, so that was a positive effect of
20
21
     the dumps.
22
               The EPA is not requiring Chevron to clean
         Q.
23
     up anything other than its own waste rock piles
24
     though, correct?
               I don't believe so.
25
         Α.
0164
1
               Thank you.
         Q.
               And as for the tailings area, Chevron
     dumped more than 100 million tons of tailings waste
```

from its mill at the Questa site into that area?

```
5
               I prefer the term deposited.
               Okay. They deposited 100 million tons?
 6
         Ο.
 7
         Α.
               Yes.
 8
               And Chevron disposed of billions of
         Ο.
     gallons of wastewater in the tailings impoundments
9
     that contaminated the aquifers beneath Chevron's
10
11
     tailing facility, isn't that right?
12
               I am not sure about that.
13
               MS. KIMBALL: Mr. Hambrick, could you pull
14
    up USX426, please.
15
               (By Ms. Kimball) This is the EPA record
    of decision of Chevron's mining activities.
16
17
               Are you familiar with this document?
18
               I am familiar with it but really that was
    outside of the scope of work that I was asked to
19
20
     address.
21
         Q.
               Okay. Then I will move on.
22
               In terms of reclamation, covering mine
23
     tailings with clean soil and revegetating is a
24
     standard practice that the owner and operator would
25
     have been expected to perform even back in the
0165
 1
    1970s, isn't that right?
 2
               In due course, yes.
         Α.
 3
               And Chevron agreed to do that at the
         Ο.
    Questa site when it got its permit to close out the
    mine from the State of New Mexico, isn't that right?
               I am not, again, I haven't run into that,
 6
        Α.
 7
    no, that area.
               Okay. But to summarize, Chevron has no
         Ο.
9
    responsibility for cleaning up any waste other than
    what it actually generated or caused, isn't that
10
11
    right?
12
        Α.
               I believe so.
13
               Let's turn now to your opinions on the
14
    DMEA or Defense Mineral Exploration Administration.
15
        Α.
               Yes.
               If I refer to that as the DMEA or DMEA,
16
17
    would you understand what that means?
18
               I prefer DMEA.
        Α.
19
         Q.
               DMEA was a Federal agency that offered
20
     loans to private companies to explore for certain
21
    minerals if that exploration met DMEA's quidelines.
22
               Is that generally accurate?
23
         Α.
               Yes.
               And did the DMEA later became the Office
         Q.
25
    of Mineral Exploration; is that right?
0166
1
               That is right.
         Α.
               If I use the term DMEA today, will you
    understand that to mean either the DMEA or the
```

```
Office of Mineral Exploration?
 5
         Α.
               Yes.
 6
         Ο.
               Chevron had no interactions with the DMEA
 7
     prior to December 1956, isn't that right?
 8
               Not that I am aware of.
9
         Q.
               Chevron submitted its initial application
10
     for a loan from DMEA on December 10, 1956; is that
11
     correct?
12
        Α.
               Yes.
13
               MS. KIMBALL: Mr. Hambrick, could you
14
     please pull up CX046, which was previously admitted.
15
               (By Ms. Kimball) Is this the -- I'm
16
     sorry, is this Molycorp's original application for
17
     the DMEA loan?
18
               Yes, I am familiar with this document.
         Α.
19
               MS. KIMBALL: Mr. Hambrick, could you
20
     please go Page 2.
21
               (By Ms. Kimball) Now, Chevron's
22
     application for a DMEA loan was purely voluntary,
23
     right?
24
         Α.
               Yes.
25
         Q.
               They weren't required to apply for the
0167
1
     loan?
 2
        Α.
               No.
 3
               And if they did not apply for a loan from
         Ο.
 4
     DMEA, they would have had no interaction with DMEA
 5
     at all, isn't that right?
 6
        Α.
               I presume so.
 7
               DMEA denied Chevron's initial application
 8
     because the proposed exploration was too speculative
 9
     based on the known geological data at the time,
10
     correct?
11
         Α.
               I have certainly read that, yes.
12
               MS. KIMBALL: And could you, Mr. Hambrick,
13
     could you please pull up CX048?
14
               THE COURT: Could you slow down just a
15
     little bit on your numbers.
16
               MS. KIMBALL: Sure, absolutely.
17
               THE COURT: All I got was 46.
18
               MS. KIMBALL: CX046. And this next one is
19
     CX048.
20
              (By Ms. Kimball) This exhibit also was
21
     previously admitted. This is DMEA December 21, 1956
22
     correspondence regarding the Chevron application,
23
     isn't that right?
24
         Α.
               Yes.
25
         Q.
               And DMEA told Chevron that it may be
0168
1
     willing to loan Chevron money to fund exploration of
     the low grade molybdenum that the latest geological
     work had suggested was present, isn't that correct?
```

```
Where do I see that?
         Α.
 5
         Q.
               So in this correspondence they were
     basically discussing the general -- their thoughts
 6
 7
     on how they would loan?
               I thought you were putting something on
 8
9
     the screen.
10
               No, I am just establishing what this
         Q.
11
     document is for the moment.
12
               MR. TODD: Objection, Your Honor. If
13
     counsel is going to ask the witness what a document
14
     says, could counsel show the witness the whole
15
     document.
16
               THE COURT:
                           I think that would only be
17
     fair.
18
               MR. TODD: Thank you.
19
              (By Ms. Kimball) You are welcome to look at
20
     the binder if you would like. It is, again, CX048.
21
               Okay. Do you want to show me the page or
22
     tell me the page?
               Well, so I think right now your counsel
23
24
     had just asked that you be familiar with the
25
     document.
0169
 1
         Α.
               Okay.
 2
               THE COURT: You will find --
               Lots of correspondence, yes.
 3
         Α.
 4
         Q.
               (By Ms. Kimball) All right. So going
 5
    back to Page 6.
 6
        Α.
               Page 6, yes.
 7
         Q.
               In the second paragraph.
               Yes.
 8
         Α.
9
               Here it says that DMEA may be willing to
     loan Chevron money to fund exploration for low grade
10
     molybdenum, is that accurate?
11
12
               I don't see that in that paragraph.
13
               THE COURT: I don't find that, counsel.
14
         Q.
               (By Ms. Kimball) Sorry.
15
               Which paragraph does it state that?
         Α.
16
               In this paragraph, the second full
         Q.
17
     paragraph, the first line it states that Chevron's
18
     initial idea was too tentative or was not supported
19
     by the geological data, isn't that accurate?
20
               That is right, yes.
         Α.
21
               DMEA ultimately told Chevron that it would
         Ο.
22
     loan it money to exploration of low grade
23
     molybdenum, isn't that accurate?
               Where do I see that?
24
         Α.
25
               Not in this document specifically, but in
         Q.
0170
1
     general?
         Α.
               It was the case, yes.
 3
         Q.
               Chevron could have simply foregone the
```

```
DMEA loan at that point and used alternate sources
 5
     of funding, correct?
               On the assumption it could raise
 6
         Α.
 7
     alternative sources of funding.
 8
               It could have entered into a joint venture
9
     with another company?
10
        Α.
               Possibly, yes.
11
               It could have gotten a bank loan?
         Q.
12
         Α.
               Possibly.
               It could have sold stock?
13
         Q.
14
         Α.
               Yes.
15
               Chevron instead voluntarily submitted a
         Ο.
16
     revised application in February 1957, isn't that
17
     right?
18
               I believe so.
         Α.
19
               MS. KIMBALL: Mr. Hambrick, could you
20
    please pull up USX140.
21
               (By Ms. Kimball) Dr. Rigby, are you
22
     familiar with this document?
23
        Α.
               Yes.
24
         Ο.
               Is this Chevron's second DMEA application?
25
         Α.
               I believe so.
0171
1
               MS. KIMBALL: Your Honor, I would like to
 2
     move to admit USX140 as an exhibit.
 3
               THE COURT: Any objection?
 4
               MR. TODD: No objection, Your Honor.
 5
               THE COURT: Without objection, admitted.
 6
               (Exhibit admitted, USX140.)
 7
              (By The Court) And Chevron ultimately
     accepted a loan to conduct diamond drilling for low
 8
9
     grade ore as well as some underground drifting and
     crosscutting in May 1957, right?
10
11
         Α.
              Yes.
12
         Q.
               And Chevron conducted --
13
         Α.
               And sampling.
14
         Q.
               Okay.
15
               Important.
         Α.
16
               Okay. And Chevron conducted exploration
         Q.
17
     using the DMEA loan through June 1960, right?
18
               Yes.
        Α.
19
         Q.
               And from that Chevron discovered three low
     grade, three blocks of low grade ore with their
20
21
     exploration under the contract; is that accurate?
22
               One, two, and three, yes.
         Α.
23
               MS. KIMBALL: Mr. Hambrick, could you
     please pull up CX107, which was previously admitted.
25
               (By Ms. Kimball) Dr. Rigby, is this
0172
1
     Chevron's final report to DMEA?
               It appears to be, yes.
 3
         Q.
               And at Page 9, are these the three blocks
```

```
that we were just discussing?
 5
         Α.
               They are indeed.
 6
         Q.
               And DMEA certified the discovery of the
 7
     ore body in January of 1961, correct?
 8
         Α.
               Yes.
9
               And even after Chevron completed
         Q.
10
     exploration under the DMEA contract, it was not
11
     under any obligation to actually mine for ore that
12
     was discovered, isn't that right?
13
               In accordance with contractual
14
     obligations, no obligation whatsoever.
15
               So if Chevron had decided at that point to
16
    not -- to get out of the mining business, they would
17
    not have owed anything back to DMEA, isn't that
18
    correct?
19
         Α.
               No, no.
20
         Q.
               You have testified that DMEA provided
21
    Chevron with technical expertise, correct?
22
               Correct.
23
               And Chevron had been mining for decades
         Q.
24
     across multiple mines in North America before it
25
     ever applied for DMEA funding, isn't that right?
0173
 1
               Yes.
         Α.
 2
               And you testified that Chevron did not
 3
     consider the possibility of mining low grade
 4
    molybdenum at the Questa site prior to its
     interactions with DMEA, correct?
 6
               Well, I wasn't there, but there was no --
 7
     in the initial application to DMEA, there was no
 8
     reference to low grade. They were basically
 9
     searching for more high grade, which sustained them
10
     for the previous 30 or 40 years.
               THE COURT: Excuse me, counsel, would this
11
12
    be a good time to take an afternoon recess.
13
               MS. KIMBALL: Sure.
14
               THE COURT: Okay. We'll be in recess
15
    until 3:15.
16
               (A recess was taken.)
17
               THE COURT: You may be seated.
18
               Before we begin, I forgot to ask for
19
     entries of appearance with everybody's name, and so
    I have got to do that or I will get in trouble.
20
21
    could we have appearances, please, for the
22
    plaintiff.
23
               MR. TODD: Gordon Todd for Chevron.
               MR. HOPSON: Mark Hopson for Chevron.
24
25
               MR. MUNDEL: Benjamin Mundel for Chevron.
0174
1
               MS. MUIRHEAD: Megan Muirhead.
 2
               MR. HUGHES: Scott Hughes counsel for
 3
    Chevron.
```

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MS. CRISHAM PELLEGRINI: And Ellen Crisham
 5
     Pellegrini.
               THE COURT: For the defense?
 6
 7
               MR. HARRISON: Brian Harrison.
 8
               MR. HOSHIJIMA: Tsuki Hoshijima.
               MR. AUGUSTINI: Michael Augustini.
 9
10
               MS. KIMBALL: Kimere Kimball.
11
               THE COURT: Thank you.
12
               Now you may proceed.
13
               (By Ms. Kimball) Dr. Rigby, just before
     we went on the break, you testified that you hadn't
14
15
     found any reference to any low grade molybdenum
16
     exploration in Chevron's original DMEA application,
17
     right?
18
               Yes.
         Α.
19
               MS. KIMBALL: Mr. Hambrick, could you pull
    up CX046.
20
               And this is Chevron's original DMEA
21
     application, correct, CX046.
22
               Mr. Hambrick, if you could turn to Page 8,
23
    please.
24
         Ο.
               (By Ms. Kimball) And in the last full
25
    paragraph. I will wait until Dr. Rigby is there.
0175
 1
               Page 8?
         Α.
 2
         Q.
               Yes.
               Sorry, to be clear the Page 8, that is the
 3
 4
    page number at the very bottom in small print. It
 5
    is the PDF page number. So it says Page 8 of 51 at
 6
    the very bottom.
 7
               Does that help?
 8
               Yes.
         Α.
 9
               All right. So do you see the paragraph
     that says, "By the time of the second Carpenter
10
     report, work had progressed westward in the granite
11
12
     on the main drift west and some exploration of the
13
     contact to the south of the main drift had been
14
     done."
15
               And then skip down a couple of lines.
    this time the possibility of finding a large low
16
17
    grade -- large low grade bodies of ore seemed
18
    possible. Then the sampling of all molybdenum from
19
    these headings was started."
20
               Is that an accurate reading of that
21
     statement?
22
               It may be an accurate reading but I don't
         Α.
23
    believe it is an accurate interpretation because the
     application from Molycorp, the initial application,
     was solely drifting and crosscutting, no sampling,
25
0176
 1
    no diamond drilling to address the third dimension.
    So that is not what they were looking for, but, of
    course, there is always the possibility that some
```

```
large amounts of low grade may be there but that
 5
     certainly wasn't the focus of what they were
 6
     proposing.
 7
               So this is their original application,
         Q.
 8
     correct?
 9
         Α.
               Yes.
10
               It does reference the possibility of
         Q.
11
     finding low grade molybdenum?
12
               It does, but it doesn't state that that
13
     was the target.
14
               Sure.
         Q.
15
               And then if you turn back to Page 40 of
16
     this document. So Chevron had attached the
17
     Carpenter report to their application?
18
               Both Carpenter reports were attached.
         Α.
19
               Correct. So the second one begins at
     approximately Page 36 of this document of CX048?
20
21
         Α.
               Are you going to put it up on the screen?
22
         Q.
               Sure.
23
               Or should I refer?
         Α.
24
               MS. KIMBALL: Mr. Hambrick, could you pull
25
     up Page 36? Maybe try 35.
0177
 1
               (By Ms. Kimball) Sir, can you see that
 2
     this is the Carpenter report --
 3
         Α.
               Yes.
 4
               -- that was attached to the application
 5
     for DMEA in their first application, correct?
               I believe that sort of background
 6
 7
     geological research interpretation potential, yes,
 8
     yeah.
 9
               So Chevron had hired Mr. Carpenter to
10
     conduct a geological study, correct?
11
         Α.
               Yes.
12
         Q.
               And Mr. Carpenter had recommended that
13
     they search for low grade molybdenum?
14
               No, I don't believe so. I think he was
15
     still recommending the possibility of high grade
16
     veins and he was certainly recommending developing,
17
     potentially drilling to find the contact where they
18
     thought the contact could well be a favorable host
19
     for high grade veins.
               So if you turn to Page 40, Mr. Carpenter
20
21
     notes the possibility of finding low grade ore,
22
     correct?
23
               Can you show me where that is stated.
         Α.
24
         Q.
               Sure.
25
               In the paragraph that begins, "The western
0178
    most penetration of the exploration."
1
               And about halfway through the paragraph it
     says, "There is a possibility that the contact
```

fringe may represent a zone of shattering and fracturing sufficiently extensive to allow for the development of low grade molybdenum ore body."

Correct?

- A. That is a possibility, yes, as he states.
- Q. So Chevron was aware of the possibility of finding low grade molybdenum before they applied for the DMEA application, right?
 - A. I would have thought so, yes.
- Q. You also testified that part of the expertise that DMEA provided Chevron was with the information on diamond drilling and drilling procedures to look for low grade ore, correct?
- A. I think it is a bit more than that because my own personal opinion is that the technical expertise which the DMEA provided free of charge, probably more important than the money itself, because they were very good, very good exploration geologists and mining engineers from the USGS and the Bureau of Mines.

And I think really what -- from the outset they were believed strongly in the possibility of

large low grade deposits of molybdenum. And what they were proposing was effectively to explore in the third dimension. That is why they brought in the concept of diamond drilling and sampling and assaying.

Because what Molycorp was proposing was just simply two dimensional exploration, the X and the Y, with horizontal drifts and horizontal crosscuts. What the DMEA was insistent on was look into the third dimension by vertically up, vertically down and incline drill holes to look at the distribution of mineralization in a volumetric sense. That is the difference.

- Q. So am I correct in understanding that they would do that through diamond drilling and long hole drilling, correct?
 - A. Diamond drilling, sampling and assaying.
- Q. And you testified previously that Chevron had done no exploratory drilling, correct?
 - A. Yes.
- Q. But diamond drilling and long hole drilling were by no means new or novel methods of exploration in the mining industry in the 1950s, were they?
- 25 A. No, not at all. 0180

Q. And Chevron had conducted its own diamond drilling specifically at the Questa site in 1954, hadn't it?

```
Not that I am aware of.
         Α.
 5
               MS. KIMBALL: Mr. Hambrick, could you
 6
    please pull up USX0003, which was previously
 7
     admitted.
 8
               (By Ms. Kimball) Dr. Rigby, this is
 9
     Chevron's October 1964 SEC disclosure, correct?
10
               Yes, yes.
         Α.
11
               MS. KIMBALL: And, Mr. Hambrick, if you
12
     could go to Page 17, the second paragraph under
13
     Exploration and Development.
14
               (By Ms. Kimball) Here Chevron disclosed
15
     that, "In 1954 the company initiated a small scale
     exploration program consisting of diamond drilling,
16
17
     of drifting and crosscutting to determine the
18
     possibility of developing large mineable tonnages of
19
     low grade material."
20
               Right?
21
         Α.
               I see that is what it says. I have given
22
     this some considerable thought. I believe that is
23
     wrong. I believe that is a misstatement and it was
24
    not offered by the appropriate technical person from
25
    Molycorp.
0181
 1
               The document is basically a legal document
 2
     to satisfy the SEC requirements. And I think what
 3
     basically is done there, they, this was in 1961, so
 4
     I think they -- he or she has inadvertently
     compressed what actually happened and there is
     absolutely no evidence in the record other than this
 6
 7
     statement that any diamond drilling was undertaken
 8
    by Molycorp prior to that associated with the DMEA
 9
     contract.
10
         Q.
               And as an SEC filing, Chevron was required
11
    to submit truthful information in that filing,
12
     correct?
13
               Agreed, but I don't really see that as
         Α.
14
    being misrepresentative. I think it was just a, you
15
    know, lack of knowledge.
16
               And you were present in the courtroom for
         Q.
17
    Mr. Dewey's testimony, correct?
18
         Α.
               Yes.
19
               And when Mr. Dewey was shown this same
         Q.
20
    paragraph did you hear him say that that did conform
21
     to his understanding of the exploration in the '50s?
22
              MR. TODD: Objection, Your Honor,
23
    misstates the testimony. I think Mr. Dewey was
     shown a document from 1957 not 1964, which did not
25
     contain the same statement regarding diamond
0182
1
   drilling in 1954.
 2
               THE COURT: Well, the record will speak
    for itself.
 3
```

- 4 MR. TODD: Thank you, Your Honor.
 - Q (By Ms. Kimball) Chevron had also conducted diamond drilling at its other mines prior to the DMEA application, correct?
 - A. I have no knowledge of that.
 - MS. KIMBALL: Mr. Hambrick, if we could go to Page 22 of USX003. And go to the second paragraph under the section on the Mountain Pass mine.
 - Q. (By Ms. Kimball) Do you see here where it refers to drilling being done at the Mountain Pass mine?
 - A. I do, and now I have that knowledge.
 - Q. And they also had conducted diamond drilling at the Oka mine in Québec, correct?
 - A. Quite possibly.

MS. KIMBALL: Mr. Hambrick, if you could go to Page 23 of the same document, the second paragraph under the Oka Mine heading.

- Q. (By Ms. Kimball) Do you see here where it refers to exploratory drilling done at the Oka Mine?
- A. Absolutely, yes.

- Q. So Chevron was well aware of the diamond drilling methodology at the time it submitted the DMEA application, isn't that right?
 - A. I would have certainly thought so.
- Q. You also opine that without the loan Chevron obtained from DMEA it could not have discovered the low grade molybdenum at the Questa Mine; is that right?
- A. I think without the loan, and let's just call it the discipline that the DMEA brought to the exploration program, I don't believe that they would have discovered it.
- Q. And lots of mining company explored for ore without seeking any funding from DMEA, correct?
 - A. The majority of them do.
- Q. If a private mining company declines to seek any loan from DMEA, then they don't have any interaction with DMEA, correct?
 - A. No.
- Q. Chevron raised funding for exploration without DMEA before it ever submitted its application, correct?
- A. I am not sure about that. They certainly raised funding. Whether that was specifically for exploration, I cannot say.
- Q. Well, they conducted exploration at the mine prior to submitting the DMEA application, correct?

- A. Do you want to be specific in terms of timeline?
 - Q. At any time.
 - A. Well, fundamental of a mining project you are constantly replacing depleted reserves, yes.
- 9 Q. They had done that without any DMEA loans, 10 correct?
 - A. Yes.

7

8

11

15

16

17

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19

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6 7

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15

16

- Q. Chevron had raised money for exploration at its Oka site by entering into a venture with Kennecott in 1955, correct?
 - A. Yes.
 - Q. And Chevron could have sought a similar arrangement with another mining or even with Kennecott at the Questa Mine, correct?
 - A. It could, yes.
 - Q. Chevron had also raised money for exploration and mining through loans with private banks, correct?
 - A. Mining through -- sorry.
- Q. Chevron had also raised money for its mining through loans from private banks, correct?
 - A. Yes, yes.
- Q. And they could have done that again in, in the '50s as well, correct?
 - A. In the '50s, well, again, provided they are able to demonstrate to whoever is going to provide the loans that there is a good likelihood of successful exploration and being paid back the loan.
 - Q. In June of 1954, just two years before applying for the DMEA loan, Chevron borrowed \$750,000 from Chase bank, correct?
 - A. I believe so.
 - Q. And at the same time borrowed another 750,000 from Manufacturers Trust Company?
 - A. Yes.
 - Q. So they were able to raise \$1.5 million even before they ever -- even before they submitted the DMEA application, correct?
- 18 I believe there were actually additional 19 raisings as well. But nowhere does it state that that is solely for exploration at Questa. Certainly 20 in the -- what is it, in 1957 raising where ${\tt I}$ 21 22 remember going back and looking at the balance 23 sheets for '52, '53, '54, '55, '56, and at the bottom of each summary, if you like, was net revenue 25 including special factors. And the maximum I saw 0186
- 1 there was a million dollars and that is for the
- 2 whole of Molycorp, you know, with its multiple
- 3 mineral interests. So I don't see there is any way

that we can really establish that with additional

```
fundraising just how much of that would have been
 5
 6
     available for exploration of Questa.
 7
               The amount of money that Chevron received
 8
     under DMEA was only $200,000, wasn't it?
               Yes, yeah.
 9
         Α.
10
               And they were able to raise 1.5 million
         Q.
11
     from bank loans in 1954, correct?
12
               Yes, I believe so.
13
               And they also were able to raise
14
     2.8 million by selling stock to Kennecott in 1955,
15
     correct?
16
         Α.
               Yes.
17
               So they were able to raise 4 million
         Ο.
18
     before they had even filed their DMEA application,
     whereas DMEA only gave them $200,000, correct?
19
               Yes. But I think 1955 the net revenue,
20
21
     including special factors, is about $500,000 for the
22
     corporation. So, you know, I don't really see how I
23
     can comment that the ability to raise would result
24
     in substantial exploration funding at Questa.
25
         Q.
               And Chevron raised another 4 million of
0187
 1
     their own private capacity solely for exploration by
 2
     issuing stock in 1957, correct?
 3
               1957 and the prospectus actually appended
     a statement or even appended the signed DMEA
 4
 5
     contract.
 6
         Q.
               Sure.
 7
         Α.
               That was good timing.
 8
               They had raised the same amount of money
9
     after submitting the application as before, correct?
10
        Α.
               Yes.
               And they had raised that money before DMEA
11
12
     had ever certified any ore discovery, correct?
13
               Yes, on the basis of the existence of a
14
     DMEA contract, which was a big positive.
15
         Q.
               On the basis of a contract for $200,000?
16
         Α.
17
               MS. KIMBALL: And just for housekeeping,
18
     Mr. Hambrick, could you please pull up CX166.
               (By Ms. Kimball) Dr. Rigby, this is
19
     confirmation of DMEA's receipt of Chevron's
20
21
     repayment of the DMEA loan, correct?
22
         Α.
               Yes.
23
               MS. KIMBALL: Your Honor, I would like to
     admit CX166 into evidence.
25
               MR. TODD: No objection.
0188
1
               THE COURT: No objection, admitted.
 2
               (Exhibit admitted, CX166.)
         Q
              (By Ms. Kimball) And this document
```

```
demonstrates that DMEA loaned Chevron $200,000,
 5
     $200,339.57 cents, correct?
 6
         Α.
               In 1966, yes.
 7
         Q.
               But they repaid it in 1966, correct?
 8
         Α.
9
               They had loaned it in 1957?
         Q.
10
         Α.
               Correct.
11
               So Chevron -- isn't it true that the DMEA
         Q.
12
     loan was for up to $255,000?
               That was the DMEA share, if you like,
13
14
     50 percent of the projected cost or the actual cost.
15
               But then Chevron only used $200,000 of the
16
     reimbursable cost, correct?
17
               Yeah, that was half of the cost.
         Α.
18
               No, they used $200,000 of the 255 half?
         Q.
19
               That is right, yeah. It was based on the
         Α.
     amount of exploration actually undertaken.
20
21
               So Chevron did not use 20 percent of the
22
     available funding from DMEA, correct?
23
               It appears that way, yes.
         Α.
24
               And Chevron did conduct its own
25
     exploration with non-DMEA funding at the same time
0189
 1
     as the DMEA funding, correct?
 2
         Α.
               Correct.
 3
               And you testified at your deposition that
         Ο.
 4
    Molycorp was doing a significant amount of
     exploratory work on its own during the DMEA
     contract, correct?
 6
 7
         Α.
               Correct.
 8
         Q.
               Chevron's final DMEA report spells out
9
     some of the work that Chevron did with private funds
     at the same time as the DMEA, isn't that right?
10
11
         Α.
               Yes.
12
               MS. KIMBALL: If we pull up CX107.
13
     Mr. Hambrick, if you could go to Page 7, please.
14
               (By Ms. Kimball) And in this section that
15
     refers to unassisted work.
16
               Do you see that?
17
               I do.
         Α.
18
               That is the work that Chevron did, at
19
     least some of the work that Chevron did with its own
     private capital during the time of the DMEA loan,
20
21
     correct?
22
        A.
               It is.
23
               And Chevron stated in its SEC disclosures
     that it spent 1.19 million of its own private
25
     capital for exploration at the same time as it was
0190
    using the $200,000 from DMEA, correct?
1
               I don't recall seeing that, but I didn't
 3
     dispute it.
```

```
Q.
               Okay.
 5
               MS. KIMBALL: Mr. Hambrick, if you could
 6
     pull up USX003 and go to Page 17.
 7
               (By Ms. Kimball) And under Exploration
 8
     and Development, the last full paragraph that
     begins, "In 1954," the second line of that paragraph
 9
10
     says, "In the years from 1957 to 1960 this effort
11
     was financed by expenditures of the company
12
     aggregating 1.19 million and to the extent of
13
     $200,000 by the Defense Minerals Exploration
14
    Administration"?
15
               So, that 1.19 is in addition to the
         Α.
16
     $200,000.
17
               Yes, that is how I read it.
         Q.
18
               It is reasonable to say of 19.19, 200,000
         Α.
19
    was applied to the contract was work applied to the
    contract and the balance was for Molycorp's account?
20
21
               Molycorp's own -- the balance was for
22
    Molycorp's --
23
               Own exploration.
         Α.
24
         Ο.
               -- exploration under its own private
25
    capital?
0191
 1
               All I can say there it must have been very
 2
     frustrating for Molycorp that that expenditure
     didn't result in anything positive.
 3
 4
               So it is your testimony that the
 5
    1.2 million that they spent on their own had no net
 6
    benefit?
 7
               No, I think we established that 200,000 of
 8
    that was on the contract.
9
              Right.
         Q.
10
        Α.
               And 900-and-something wasn't. And I am
    not aware that they -- that they were successful and
11
12
     found anything of substance.
13
               So you testified that DMEA certification
14
     of the ore body allowed Chevron to borrow additional
15
     funding, correct?
16
               Yes.
17
               But DMEA certified Chevron's ore discovery
         Q.
18
     in 1961, correct?
19
              Yes.
        Α.
               And Chevron raised $8 million of private
20
21
     capital with no DMEA certification just between 1954
22
     and 1957, right?
23
               I think we already covered the 1957
     whereby they appended their signed contract to that
25
     fundraising so that was, you know, from a market
0192
1
    perspective that was deemed to be a positive.
         Ο.
              The $4 million?
 3
        Α.
               Yeah.
```

```
In 1957?
         Q.
 5
         Α.
               Yeah.
 6
         Ο.
               They raised 4 million before that without
 7
     the application?
 8
        Α.
9
               We just covered that Chevron raised
         Q.
10
     $1.5 million from private banks in 1954 and
11
     2.8 million from Kennecott in '55?
12
         Α.
               Agreed, yes.
               And Chevron had been mining for decades
13
         Q.
14
    before it ever received any DMEA certification,
15
     correct?
16
               Three-and-a-half decades, I think.
         Α.
17
               The certification of discovery did not
         Ο.
18
    require Chevron to do anything, correct?
               Other than what they have done in
19
     accordance with the contract.
20
21
               Well, the certification didn't require
22
     them to do anything, did it?
23
               THE COURT: Counsel, you have already
24
     asked him that question at least twice.
25
               MS. KIMBALL: I'm sorry, Your Honor.
0193
 1
               THE COURT: They didn't have to do
 2
     anything if they didn't want to.
 3
               MS. KIMBALL: Okay. Thank you,
 4
    Your Honor.
 5
               Other than submit a final report.
        Α.
 6
         Q.
               (By Ms. Kimball) And the certification of
 7
    discovery did not guarantee that it would be
 8
     feasible to mine any of the ore blocks, correct?
 9
         Α.
               Correct.
10
         Q.
               The certification did not give any
     consideration to potential mining or milling costs?
11
12
        Α.
            No, premature.
13
         Q.
               Or any ore grade cutoff?
14
             Premature.
        Α.
15
             Any waste or ratios?
         Q.
16
         Α.
              Premature.
17
         Q.
               Or any market prices?
18
               The same comment.
         Α.
19
               The certification also did not dictate
         Q.
    what method of mining might be used if Chevron
20
21
    decided to continue exploring and develop a mine,
22
    correct?
23
               It didn't explicitly state it but it was
         Α.
     obvious for anyone who looked at the tonnage grade
25
     and basically depth of where that mineralization had
0194
    been discovered, that the only way of mining that
1
    was by an open pit.
              Now, did the exploration under the DMEA
 3
         Q.
```

```
loan was at the 7800 level, correct?
 5
         Α.
               Yes.
 6
         Ο.
               And the open pit was from the surface down
 7
     to about 8400, correct?
 8
        Α.
               Yes.
9
         Q.
               So the open pit never got down to the area
10
     that was explored under DMEA, correct?
11
               Not quiet, but what needs to be
12
     appreciated is that the up-holes from Drift Number 3
     East and the downholes from Drift Number 4 West
13
14
     intersected the mineralization which subsequent
15
     drilling confirmed was continuous all the way
16
     through to surface. So it is the same orbity.
17
               So after the DMEA loan or after the DMEA
18
     exploration was completed and Chevron conducted
19
     additional exploration on its own, it was able to
20
     open an open pit mine, correct?
21
               It was, but it wouldn't have been able to
22
     without the most fundamentally important of any new
23
     Greenfield, well -- Brownfill Mining project which
24
     is the discovery of mineralization from exploration
25
     and that is what the DMEA program resulted in.
0195
 1
               And that was --
         Q.
 2
               The most important time in a mine's life.
         Α.
 3
               And that was the discovery of ore bodies
         Ο.
     down at the 7800 level, correct?
 4
 5
               Which subsequently were approved to be
 6
     continuous through to surface.
 7
               So the historical documents consistently
 8
     describe the open pit mine as the result of
 9
     exploration Chevron undertook after the DMEA loan,
10
     correct?
11
               As I said the DMEA exploration resulted in
12
     the discovery of what was a large volume of low
13
     grade material. That was just a start of the work
14
     that was needed to be done to prove that up prior to
15
```

making a development decision.

MS. KIMBALL: Mr. Hambrick, could you please pull up CX118 which was previously admitted.

And I think if you go to Page 3 it gives the title

Q. (By Ms. Kimball) Dr. Rigby, this is a report of Questa Mine by the -- I think if you go to Page 9 it also provides some additional information, but this is a report of Questa Mine by Bear Creek Mining Company which was a subsidiary of Kennecott, correct?

25 0196

16

17 18

19

20

21

22

23

page of the document.

1 A. I believe so, yes. 2 MS. KIMBALL: Mr. Hambrick, could you 3 please turn to Pages 67 and 68.

```
And if we could see the bottom of 67 where
 5
     it starts.
 6
         Α.
               57?
 7
               (By Ms. Kimball) This is PDF 67. It
 8
     follows the Bates numbering at the very bottom of
9
     the page.
               MS. KIMBALL: So, Mr. Hambrick, if you
10
11
     could pull up side by side the bottom paragraph of
12
     Page 68 beginning with Subpart B.
               (By Ms. Kimball) Okay. Dr. Rigby, do you
13
14
     see here it is describing the Sulphur Gulch
15
     mineralized zone?
16
         Α.
               Yes.
17
               And the Sulphur Gulch mineralized zone is
18
     where the open pit was ultimately placed, correct?
19
         Α.
               Yes.
20
               And then if you go to the top of Page 68.
         Q.
21
               Do you see here where it says, "Molybdenum
22
     is visible at the surface in some places"?
23
               Yes.
        Α.
24
               Later on it says, "The eastern edge of the
25
     ore has been penetrated by numerous and extensive
0197
 1
     addits."
 2
               And then the last sentence of the
 3
     paragraph -- I'm sorry the next sentence says,
     "These workings were driven in search of high grade
 4
 5
     veins but little production is reported from them.
     No drilling has been done here by Molycorp during
 6
 7
     their low grade exploration program."
 8
         Α.
               Yes, I wouldn't have expected that because
9
     the drilling was confined to the agreed underground
     in accordance with the DMEA contract.
10
               And the exploration that had been done in
11
12
     the area of the open pit was all for high grade,
13
     correct?
14
               I am -- well, no production came from the
15
     open -- well, there wasn't an open pit, so no
16
     production from surface was forthcoming and no
17
     drilling was done at the time until post-1961.
18
               So, I'm sorry, in this paragraph it says
19
     that there were numerous and extensive addits that
     had been driven in search of high grade veins,
20
21
     correct?
22
         Α.
               Yeah, but I don't know when that was
23
     actually done.
               Okay. But it was not done under the DMEA
24
25
     loan, correct?
0198
1
         Α.
```

So the area of the open pit had been

explored but not under the DMEA loan, correct?

- A. I think it had been partially explored but with some stage in the past. But without the benefit of the results of the DMEA exploration program successfully delineating the three ore blocks, so low grade ore blocks.
- Q. So there had been exploration for high grade ore at the surface for mineralization was visible on the surface?
- A. Yes. I presume those were the addits that were referenced.
- Q. And do you see in the last sentence of this section it says, "This area is of particular interest as a potential open pit deposit."
 - A. Yes, yes absolutely right.
- Q. And that is ultimately what Chevron did, correct, they put the open pit in Sulphur Gulch?
 - A. Yes.

- Q. On the area of mineralization that was up at the surface?
 - A. That was first identified from the DMEA contract underground.
- Q. So you previously testified that there was 0199
- no drilling done under DMEA in the area that became the open pit, correct?
 - A. Not in accordance with the contract that I am aware of.
 - Q. That there was no drilling -- sorry, that was a bad question with too many negatives.
 - It was your previous testimony that there was no drilling in the area of the open pit under the DMEA contract, correct?
 - A. Correct.
 - Q. Okay. And you further testified that all of the exploration in that area began in 1962, correct?
 - A. Subsequent to the discovery of the three ore blocks and the emphasis shifting to surface drilling, yes.
 - Q. And the models that you discussed in your direct testimony you further confirm that there was no drilling under the DMEA contract that occurred in the area that became the open pit, correct?
 - A. Certainly not that I am aware of.
- MS. KIMBALL: Let's look at USX380 which was previously admitted.
- Q. (By Ms. Kimball) Dr. Rigby, this is an image that you prepared for your expert report, 0200
- 1 correct?
 - A. One of many.
 - Q. And this is a side view into the mountain,

```
correct?
 5
               Well, it is interesting because can I just
        Α.
 6
    give a clarification here? This is a view looking
    northwest, which means it is basically a projection.
 7
    It is an isometric view and it wasn't intended to
 8
    show the geometrical relativity between the open
9
    pit, the underground, the drill holes and so on.
10
11
    That wasn't its subjective because it says it was a
12
    view through the open pit location, not the open pit
    because the open pit didn't exist at that time. But
13
14
    you have to, whatever features you want to show, you
15
    have to project them onto a particular plane.
16
         Q.
               Sure.
17
              Then you look at an oblique view and it
18
    distorts the relative position. So I think for the
    purposes that you want to use this diagram for, it
19
20
     is misleading. What I was going to suggest if you,
21
     if you would allow me is just to do two very simple
22
     sketches on the white board, which I think will
23
     clarify what I am trying to say.
24
              We will go through all of the images in
25
     your report. So in this image am I correctly
0201
    understanding that the DMEA exploration occurred in
 1
 2
    what would have been southeast of the location that
 3
    became the open pit?
        A.
 4
             South -- wait a minute.
 5
              Did I get my directions wrong?
         Q.
 6
        Α.
              Southwest.
 7
              Okay. Because we are looking northeast
         Q.
 8
    you said?
9
              Northwest we are looking. That is why I
    wanted to show you the orbity, then you would know
10
11
    straight away.
12
         Ο.
              We will get to that. So the DMEA drilling
13
    is at a location that is south and west of the open
14
    pit, correct?
15
               Yes, that is fair.
        Α.
16
         Q.
               Okay.
17
               THE COURT: But there is no open pit
18
     there, right?
19
              MS. KIMBALL: Sorry?
20
               THE COURT: There is no open pit.
21
              (By Ms. Kimball) There was no open pit at
22
     the time, of the area that became the open pit?
23
              Yes.
               Am I correctly understanding here that the
24
         Q.
25
     neon green lines are the diamond drill lines?
```

1 A. They are.

- Q. That were done under DMEA?
- 3 A. Correct.

```
Am I correct in understanding that all of
 5
     the drilling under the DMEA was done at an elevation
 6
     hundreds of feet below what is depicted on here as
 7
     the open pit?
 8
               Well, that it just says the open pit
9
     location. There isn't an open pit there, that is
     why I am saying this is misleading because you go to
10
11
     bring the third dimension in to see just how big the
12
     open pit was and the relationship between the open
13
     pit and the low grade mineralization, which was
14
     discovered under the DMEA contract. The two are
15
     very closely related.
16
               But the DMEA contract drilling occurred
         Q.
17
     several hundred feet below the lowest elevation of
18
     the open pit, right?
               There were vertically drilled up-holes in
19
20
     continuity of mineralization.
21
         Q.
               But the up-holes were maximum of 500 feet,
22
     correct?
23
               Yes. Still intersected the
        Α.
24
     mineralization.
25
         Q.
               Which was still lower than the bottom of
0203
    the open pit?
 1
 2
               The open pit ultimately, I can't show, can
 3
              The thing you have to bear in mined is this
     I draw?
     enormous amount of waste rock which basically limits
     the distance down the orbity that an economic open
    pit could extract. And that is why the exploration
 6
 7
     was deeper, I agree, but it was directly below what
 8
    ultimately became the open pit side walls.
 9
         Q.
               Okay.
10
               MR. TODD: Your Honor, for the record
11
     could we preserve this as a demonstrative?
12
               THE COURT: I'm sorry?
13
               MR. TODD: For the record, Your Honor,
14
     could we preserve the marked up chart as a
15
     demonstrative exhibit?
16
               THE COURT: How do we do that?
17
               (Discussion off the record.)
18
               I still don't like this view. There are
19
     much better views that we could use.
               (By Ms. Kimball) Let's look at CX420
20
21
     which is another image from your expert report.
22
     this is also an image from your expert report,
23
     correct?
24
        Α.
               This is.
25
         Q.
               This exhibit has also previously been
0204
    admitted.
1
 2
        Α.
              It is.
```

And there is no place in looking at this

3

Q.

- image where the drillings intersect the area that became the open pit either, correct?
 - I believe that is where I should have added another note to this diagram. Because the green outline is the base of the open pit, okay? is the bottom of the open pit.

THE COURT: Which green outline?

- That one, that is the bottom of the open Α. pit. The open pit is several hundred feet deep and it has slopes ranging from 28 degrees in the riolites, 38 degrees in the undersites and 45 degrees in the granite, which should make this sort of open pit perimeter somewhere like that (indicating).
- (By Ms. Kimball) Several hundred to several thousand feet above those lines, correct?
- These are -- if you look at an overall slope handle it may be 28, 38, 45, maybe 35 degrees. You know, it is not steep, it is flat. So over a depth of an open pit, several hundred feet thick, you could well be 2,000 feet further horizontally to the south.
- Because you have removed a bunch of overburden, correct?
- Yes, but the pit slopes are sort of like that (indicating). They are not 45 degrees, they are more like 33, 35.
 - Q. Okay.

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0205 1

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MS. KIMBALL: Let's go to USX379.

- (By Ms. Kimball) Now, this is an image from your expert report that then has grid lines superimposed on top of it, correct? This exhibit has also been previously admitted?
 - Α. Yes.
 - Q. This is an image from your expert report?
 - Α. It is indeed, yes.
- 15 Thank you. Q.

16 And the arrows and dots show the drills 17 under DMEA that are closest to the open pit, 18 correct?

- Α. Correct.
- Q. And they are still to the west of the open pit, correct?
- Α. But again the same point as the last This is the base of the open pit. And so, you know, I mean, to do what I did previously you might be having something, you know, like that 0206
- 1 (indicating).
- But none of those drill lines ever intersected the open pit, correct?

```
They intersected the mineralization that
 5
     was exploited by the open pit, yes.
 6
               They never intersected the area that was
 7
     actually excavated by the open pit, correct?
8
              They, actually they did. They didn't
9
     intersect the material that was mined in the open
     pit, but the ore that they intersected immediately
10
11
     above was part of the stripping to access the ore in
12
     the open pit. So it is within the open pit
13
     perimeter.
14
               It is within the open pit perimeter, but
         Q.
15
     several hundred feet below it?
16
         Α.
               Correct.
17
               Okay. Several hundred to several
         Ο.
18
    thousand?
19
               I would say several hundred rather than
        Α.
20
     several thousand.
21
               But the perimeter is going from the
22
     overburden that is --
23
               It depends whether you are talking down
24
     dip, vertical or what. Let's not complicate things.
               MS. KIMBALL: Your Honor, this would
25
0207
1
     actually be a decent time to stop.
 2
               THE COURT: Okay. We will be in recess
 3
     until 9:00 tomorrow morning.
 4
               (Proceedings concluded at 3:57 p.m.)
 5
 6
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0208
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